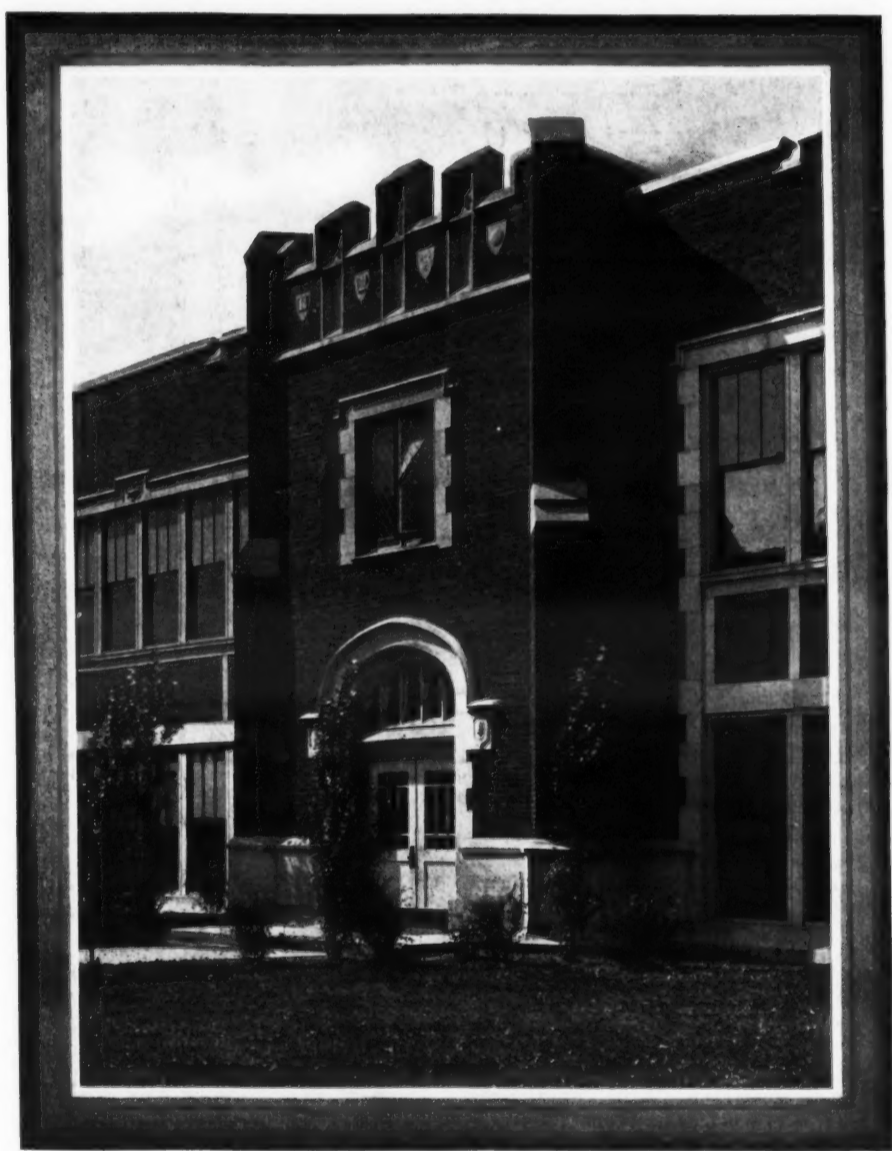


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APR 4 1930

THE AMERICAN School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION



April, 1930

THE BRUCE PUBLISHING COMPANY

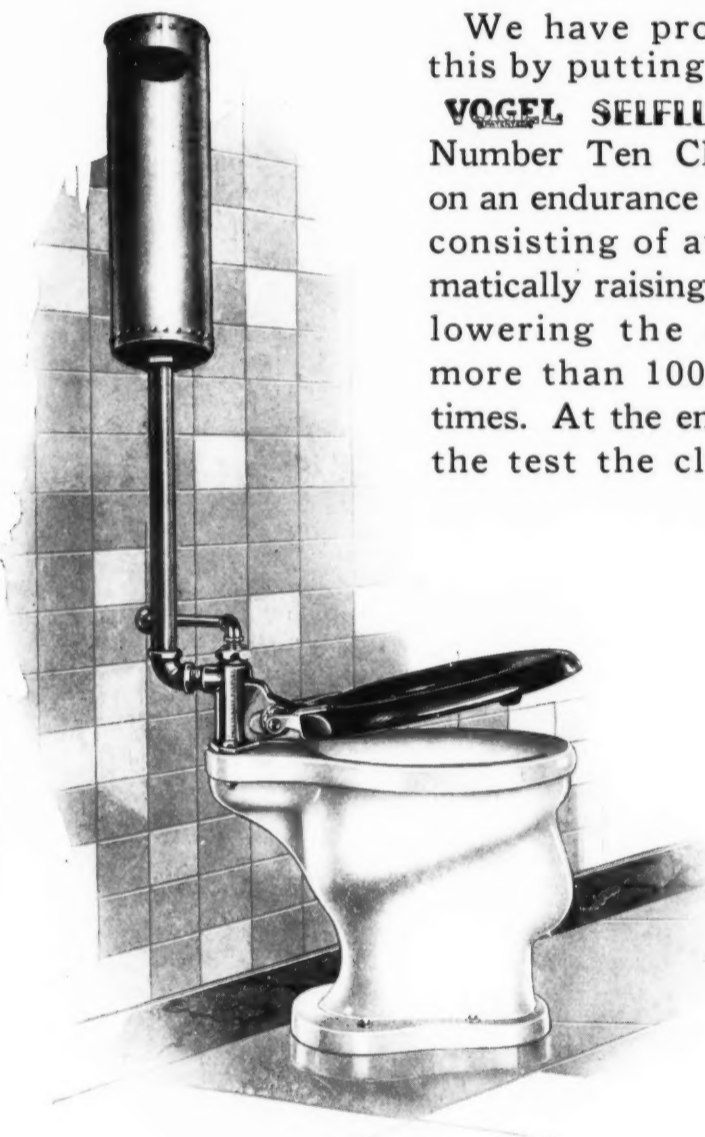
New York

MILWAUKEE, WIS.

Chicago

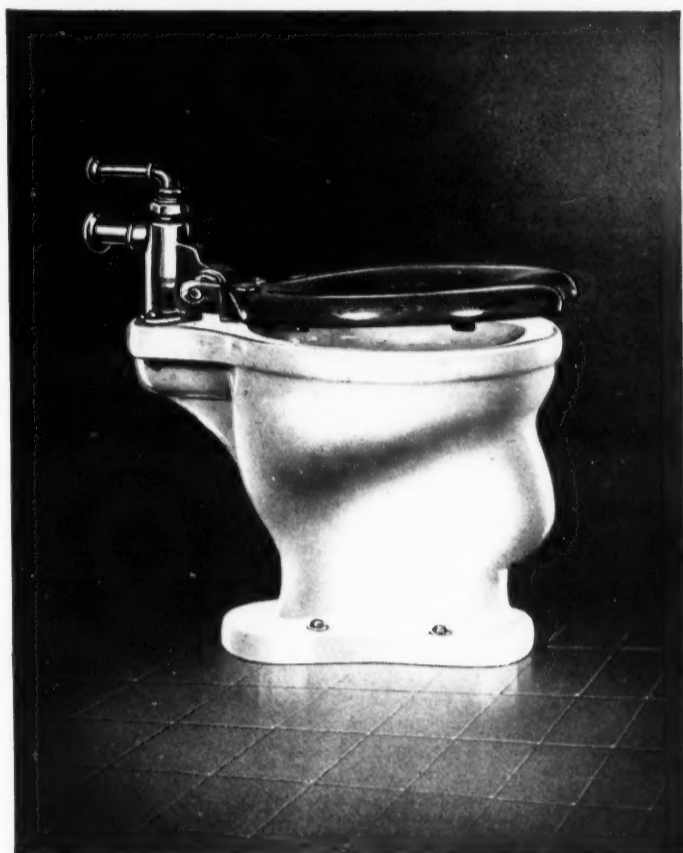
With these closets installed you can forget about repairs!

The **VOGEL SELFFLUSH** Number Ten-A seat-action closet is designed that the tank may be placed behind the wall without the possibility of costly repair work in the future. The only thing to ever need repairing is a washer which may have to be renewed after ten years. This can be done in less than five minutes.



Vogel Number Ten Seat-action Closet, with tank exposed

We have proved this by putting the **VOGEL SELFFLUSH** Number Ten Closet on an endurance test, consisting of automatically raising and lowering the seat more than 100,000 times. At the end of the test the closet



Vogel Number Ten-A syphon action bowl, with tank concealed

showed not the slightest sign of wear. This is equivalent to 25 years use. This test continues.

The tank, the seat, and the bowl of the **VOGEL SELFFLUSH** Number Ten and Number Ten-A Closets are all of the finest quality obtainable, and the valve has all working parts of high tension bronze. For economical, good-looking outfits install **VOGEL SELFFLUSH** Closets in your school.

*Important, too, is the fact that children don't have to remember to flush **VOGEL SELFFLUSH** Closets . . . And they always flush.*

JOSEPH A. VOGEL COMPANY

WILMINGTON, DEL.

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VOGEL *Products*

SOLD AND INSTALLED BY PLUMBERS EVERYWHERE



Charles A. Smith
Architect of the
Kansas City
School District,
Kansas City, Mo.

*"Natural Slate Blackboards
installed 42 years ago are
still in use"*

CHARLES A. SMITH
ARCHITECT
800-12 FINANCE BLDG.
KANSAS CITY, MO.
January 30,
1930

Natural Slate Blackboard Company,
Argyl, Pennsylvania.

Gentlemen:

Having been architect for the School District of Kansas City, Missouri, for a period of more than thirty years I have had an opportunity of observing the results of the use of natural slate blackboards and of several artificial slate substitutes, installed in our buildings.

I have never found a satisfactory substitute for natural slate and since there is practically no cost for maintenance it is the most economical material for blackboard use.

In our Irving School, natural slate blackboards installed forty-two years ago are still in use and have the same smooth surface and appearance as the slate boards in recently built additions to the original building.

I am using nothing but natural slate for blackboards in all of our new schools.

Very truly yours,

Chas. A. Smith
CHAS. A. SMITH, ARCHITECT

CAS/mbv

It is easy to understand why the leading architects of the country such as Mr. Charles A. Smith, the writer of the above letter, specify exclusively "Pyramid" Natural Slate Blackboards.

They have stood the test of Time. They are not experiments. Their depreciation is less. They cost

less for upkeep. They are fire-resistant. In short, they are the logical, proven blackboards.

Two booklets describing Natural Slate Blackboards, containing specifications, data and an interesting story on the quarrying and finishing are yours for the asking.

NATURAL SLATE BLACKBOARD CO., 440 ROBINSON AVE., PEN ARGYL, PA.
BRANCH OFFICES IN ALL PRINCIPAL CITIES

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NATURAL SLATE BLACKBOARDS

Natural Slate Blackboards Outlast the Building



GYMNASIUM FLOORS CLASSROOM FLOORS CORRIDORS AND EQUIPMENT

**SEND FOR BOOKLET
"WHY MIDLAND
MEN KNOW"**

Above a group of Midland men are at work rehabilitating a badly used gymnasium floor in a large High School.

Midland Chemical Laboratories, Inc.,
Dubuque, Iowa, Dept. B J-4

Gentlemen: Please send me booklet "Why Midland Men Know" and complete information regarding Midland School Housekeeping.

Name.....
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They all come under the eye of the Midland Maintenance Engineer. All are studied, classified and experimental work is being conducted daily in every branch of school building maintenance. Under the title of MIDLAND SCHOOL HOUSEKEEPING SYSTEM modern school upkeep work is going forward in every part of the country in schools large and small. Midland materials have been fitted to present-day requirements and the result is maximum efficiency at minimum cost.

We will be glad to furnish you with complete information and schedules without obligating you in any way.

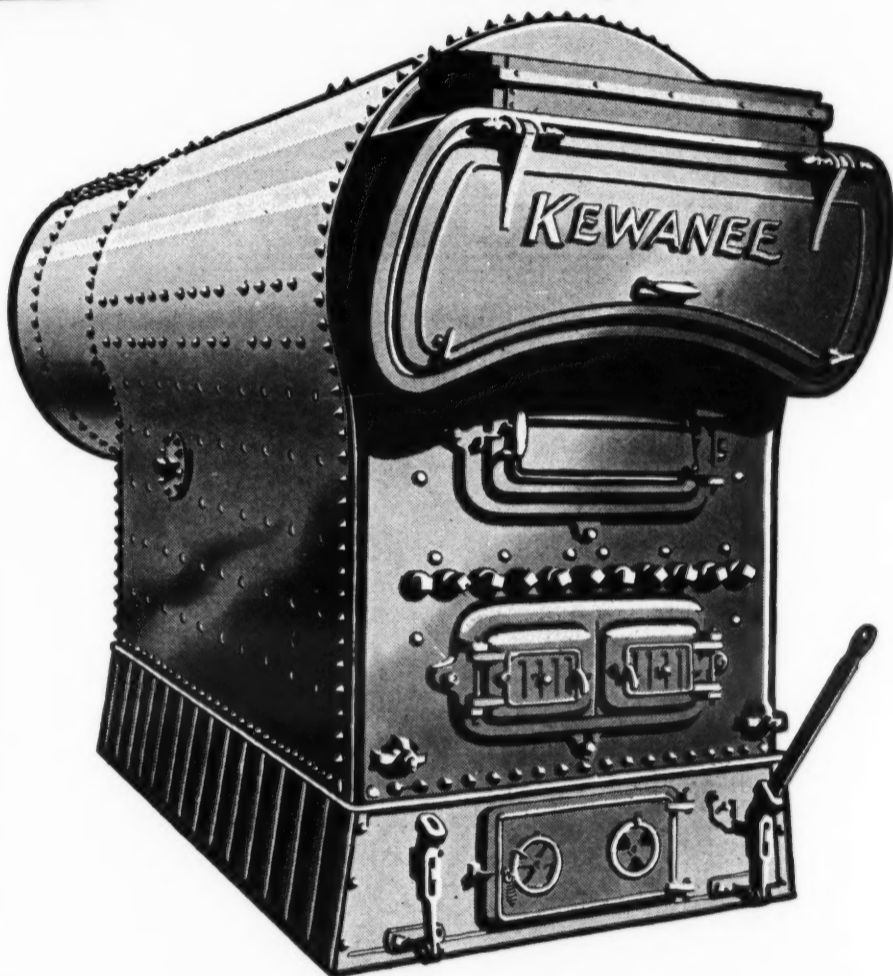
Midland Chemical Laboratories, Inc.
Dubuque, Iowa, U. S. A.

KEWANEE

STEEL BOILERS

Old time wooden bridges cost less to build than modern steel structures. But they continually needed repairs and soon had to be replaced.

Experience has shown that the economical way is to build durably.



The durable, steel riveted construction of Kewanee Boilers adds so many extra years to their life that the cost per-year-of-service is far below that of makeshift "bargain boilers."

Furthermore: Correct and

generous design guarantees more heat with less fuel while unusually sturdy construction practically eliminates repairs.

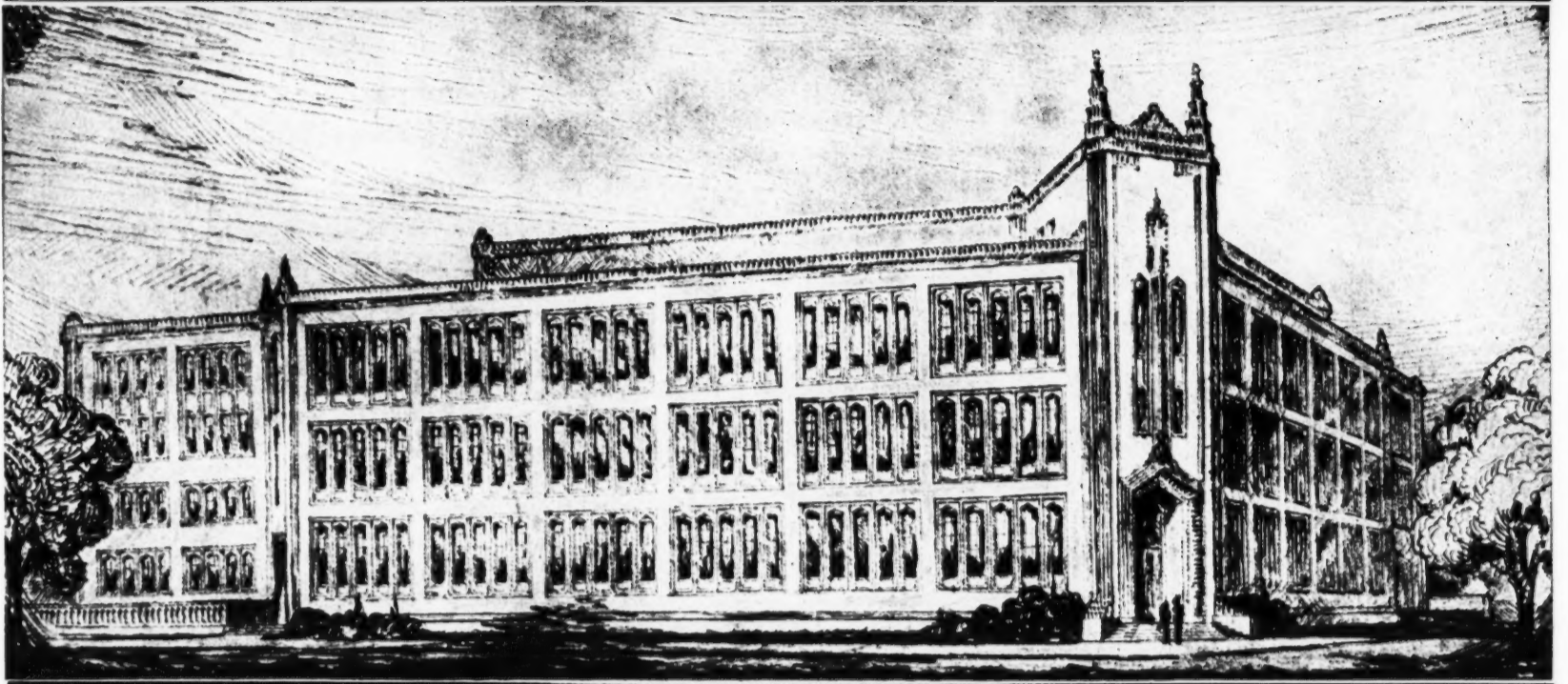
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HOLY ANGELS HIGH SCHOOL, MILWAUKEE, WISCONSIN

BARRY BYRNS, CHICAGO—Architect

Another Impressive School Building That Is Johnson Controlled

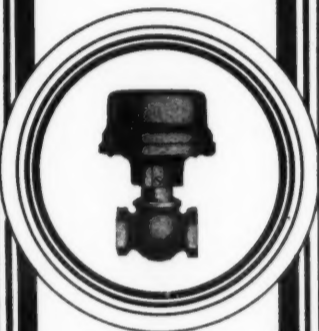
The Johnson Dual System is installed in Holy Angels High School, Milwaukee. Dual Thermostats regulate the heat in the classrooms, laboratories, gymnasium, and auditorium. A constant temperature of between 70° to 72° is automatically maintained in each room during the day. At the close of school hours the Dual Thermostats reduce the steam in the vacated rooms and maintain a night temperature of 50°. In the morning the Dual Thermostats automatically turn on the steam again and bring the temperature of the school rooms to between 70° and 72°, and maintain that temperature throughout the day. The convenience and comfort and fuel economy derived are specially stressed by this school's personnel, in their expression of the total satisfaction experienced with Johnson Control, and Johnson's inspection service given annually to insure perfectly correct operation. Your school buildings can likewise profit by installing Johnson Control and obtaining Johnson Service advantages: highly recommended by schools everywhere in every state in the Union. Write now for the fully explanatory and illustrated Johnson book of details.

JOHNSON SERVICE COMPANY

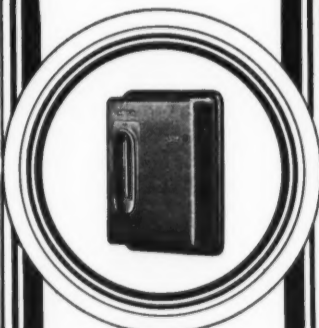
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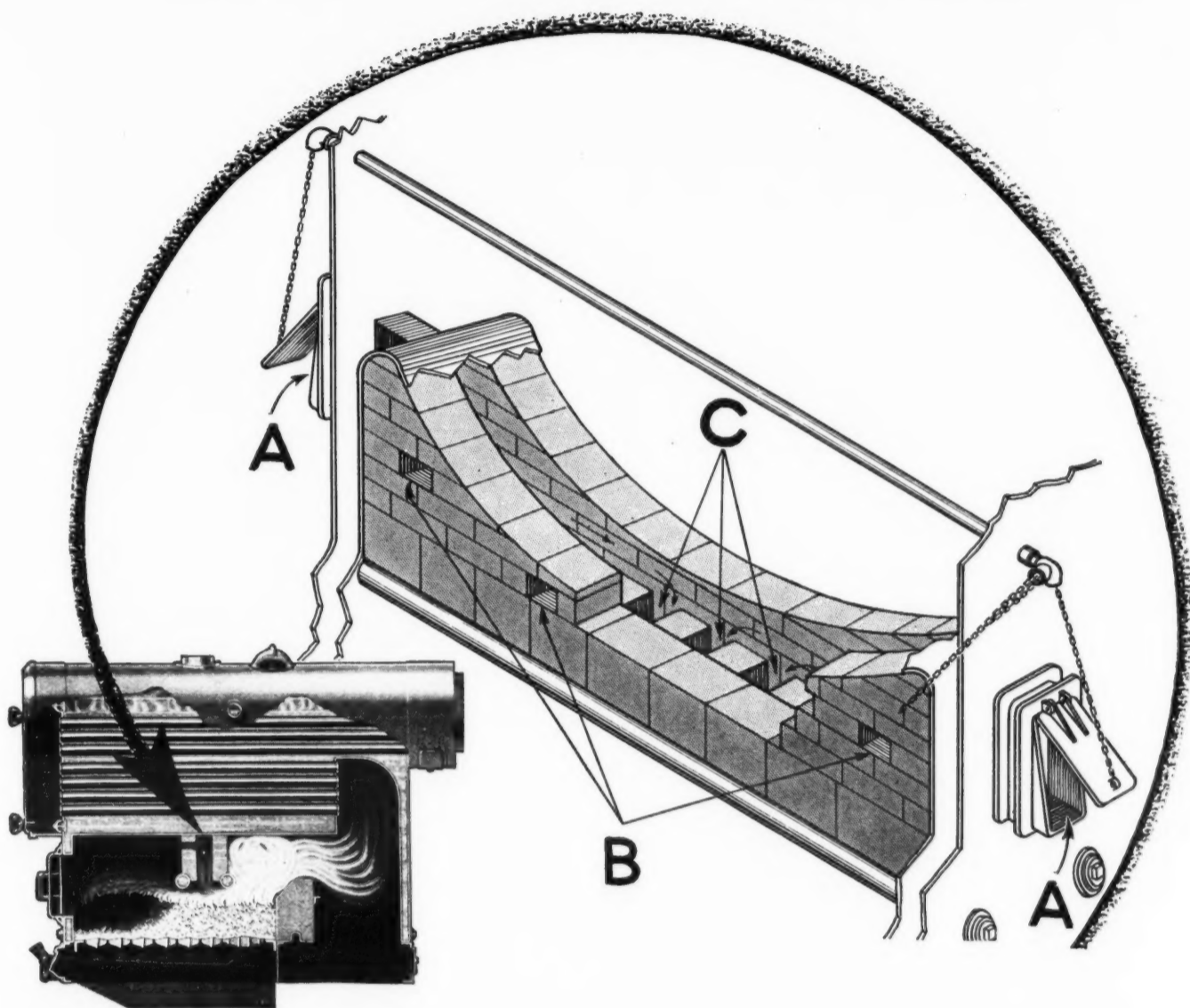
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The Dual Thermostat (Night and Day) Control
Fuel Saving 25 to 40%

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Heat—but No Smoke from Soft Coal



IT furnishes plenty of air—heated air—over the fire. Admits it at the right point! Produces just the right mixture. That is why this Heggie-Simplex Boiler burns soft coal smokelessly!

The additional oxygen essential to smokeless combustion, but which cannot be drawn through the fuel bed alone, is introduced through the refractory chamber illustrated above.

Air is drawn through intake doors (A) on both sides of the boiler. Volatiles rising from the fresh

fuel are admitted through the ports (B). These inflammables are thoroughly heated by the hot refractories of the chamber before passing through the jets (C) down onto the fire.

Here they mix with the soot-laden gases streaming under the chamber. The refractory baffle wall to the rear throws this mixture into a turbulent, incandescent eddy. Oxygen and gases unite. All combustibles are burned. The space beyond assures ample room for completing combustion before entering the flues.

For full details write Heggie-Simplex Boiler Co., Joliet, Ill.

Member of The Steel Heating Boiler Institute.

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SMOKELESS HEATING BOILERS

Von Duprin

Self-Releasing Fire and Panic Exit Latches

Why It Pays to Buy Type "B"

There are two important reasons why buying the genuine Type "B" Von Duprin devices brings satisfaction to both architect and owner.

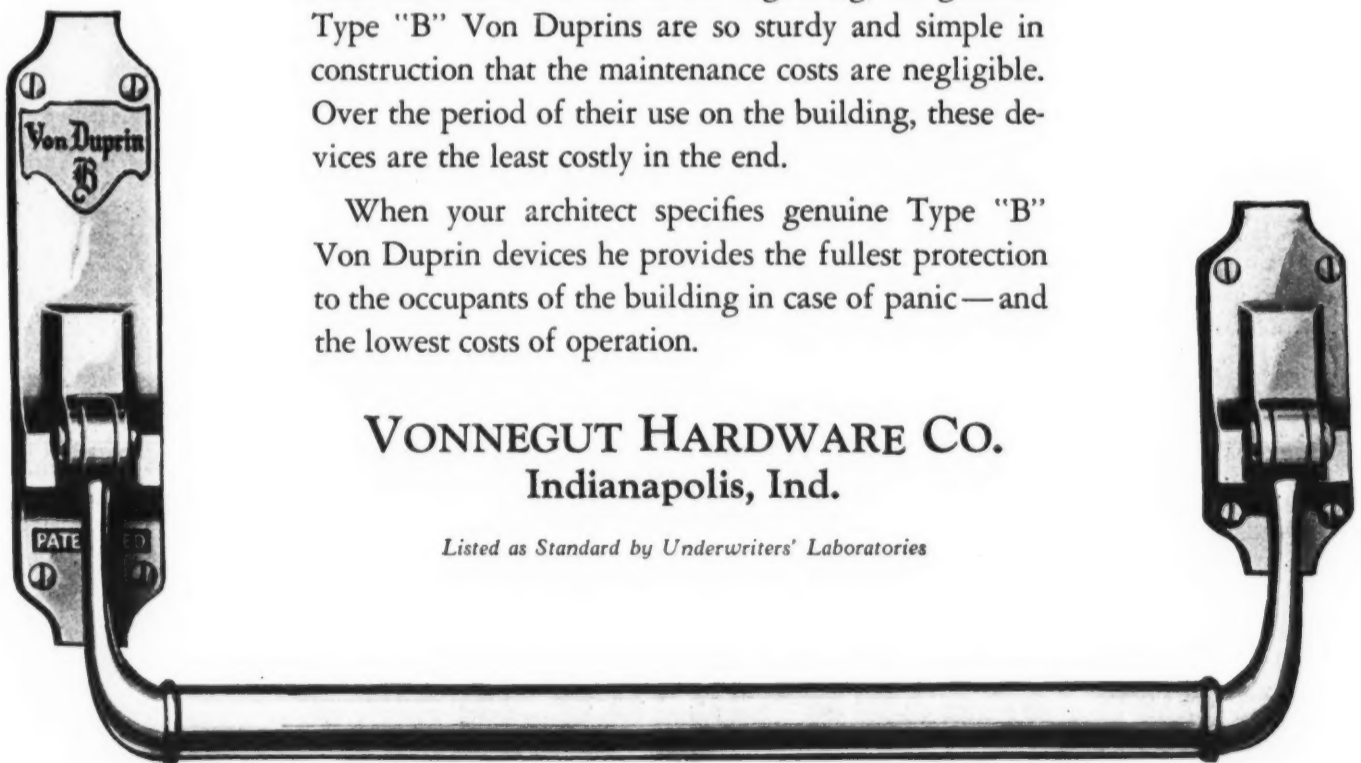
First, and most important, is the fact that the genuine Type "B" has reliability, sureness of operation, far beyond even the other types of Von Duprins.

And then there is the factor of expense. Costing more than other devices in the beginning, the genuine Type "B" Von Duprins are so sturdy and simple in construction that the maintenance costs are negligible. Over the period of their use on the building, these devices are the least costly in the end.

When your architect specifies genuine Type "B" Von Duprin devices he provides the fullest protection to the occupants of the building in case of panic—and the lowest costs of operation.

VONNEGUT HARDWARE CO.
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Can't Stand Unflushed

Record No. 110

After 22 years' service at the Bingham School, Lansing, Michigan, the total repairs on 24 Clow Madden Automatics totalled just five dollars.

Unflushed closets are filthy, dangerous headquarters for filthy, dangerous insects, smells and germs. Clow Madden Automatics can *never* stand unflushed.

Each time, *each time*, no matter how *many* times they are used . . . Clow Madden Automatics flush themselves. They're automatic. They can't stand unflushed.

Sanitation follows Clow Madden Automatics . . . through 25 and 35 years, and more.

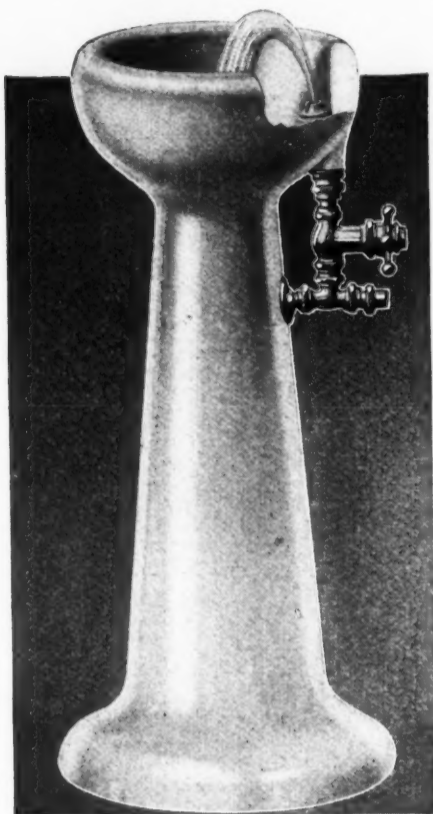
Water bills become easy to pay. Repair bills seldom happen. (Read Record No. 110.) Send for details on these economical guardians of school, plant and public building sanitation.

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Have Sanitary Features!

In addition to their clean and beautiful designs—Rundle-Spence drinking fountains have a bigger advantage in their special patented Vertico-Slant. This feature throws the water at an angle and consequently does not permit the lips to touch the nozzle. Naturally every drink is a sanitary one — a clean, clear, safe drink at all times.

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BAY WEST Mosinee service has supplanted every other type of towel service — paper and cloth — in the washrooms of more than a thousand schools.

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To make this test in your own washroom—simply mail us the coupon.

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The UNIVENT is the connecting link...

Think of a school room flooded with health giving invigorating mountain air. Can you think of any atmosphere more ideal for fitting the coming men and women of America to meet their future responsibilities as leaders of our nation?

We can't, of course, bring the mountains to our schools, nor our schools to the mountains, but we can give our school children in any school anywhere, the benefits of the great out-of-doors through Univent Ventilation.

Look at the happy, healthy children in the illustration. The photograph is of a Univent Ventilated school room taken in 1924, and from this same Illinois school, each year the Univent is producing similar specimens.

*between outdoors
and indoors*

The Univent brings into the room, outdoor air, cleans it, tempers it and distributes it to each occupant of the room with gentle invigorating air motion—but without drafts.

School executives who adopt Univent Ventilation are fulfilling one of their greatest responsibilities to the children of their community. In addition they are meeting their pledge to the tax payers by

investing in a ventilating system that effects great savings in operating and maintenance cost.

Consult your architect, engineer or our nearest sales office about the Univent. If you prefer, write for our illustrated book, "Univent Ventilation."

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* Makers of the *Univent*, for the ventilation of schools, offices, churches and all buildings having an acute ventilating problem—the *Herman Nelson Invisible Radiator*, for residences, apartments, hotels, offices and monumental structures—the *Herman Nelson hi Jet Heater*, for economical distribution of heat in factories, mills, garages, warehouses, and smaller buildings.

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This system amplifies sound and distributes it. It provides music, wherever desired, when used with a radio set or the Western Electric Music Reproducer which plays phonograph records in rich full tones.

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is to be expected because of the long experience of Western Electric in making telephones and other sound transmission apparatus. For further information, address the distributor, Graybar Electric Company, Graybar Building, New York, N. Y. Offices in 73 principal cities.

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that Improve Floors

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WHY continue to pay for costly repairs to concrete and wooden floors when for 1c to 2c a square foot you can protect them against wear and also keep down your budget for years to come? Lapidolith, a Sonneborn product, makes concrete floors granite-hard. Lignophol, another Sonneborn product, toughens wooden floors and prevents warp and rot. These, and the other Sonneborn products described below, are used by the country's foremost schools and colleges for the lasting protection and saving they insure. Let us send you letters from these institutions, also complete description of the products themselves. Use the attached coupon.

We have every kind of paint and varnish for every school use from floors to desks—from cellar to roof—for inside and out

For CONCRETE Floors

Hardening and Dustproofing

Lapidolith—This liquid chemical concrete hardener welds the loose particles into a close-grained mass that becomes granite-hard, and eliminates concrete dust. Excellent for basement or any floor receiving hardest wear. The flint-like topping withstands years of traffic. Water or chemicals do not readily penetrate it. Merely mopping and sweeping keeps a Lapidolized concrete floor sanitary. Goes on like water so labor cost is negligible. Equally efficient for old or new floors. Colorless.

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Cement Filler—For floors where decorative appearance is wanted as for hallways, basement rooms, toilets, etc. apply this material over new or old surfaces. Forms a wear-resisting smooth, colored top over rough, pitted or soiled floors. Standard colors. Easy to apply. Labor cost small.

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Lignophol—This penetrating preservative prevents splintering, checking, warping, and rotting by filling interior wood cells and fibres with oils and gums. Supplies a toughening binder that increases tensile and resisting power of wood. Safeguards floors against deterioration from dry heat and moisture, and waterproofs.

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Amalie Liquid or Paste Wax—Where a more lustrous finish is desired, apply this highly decorative Carnauba Wax. Has high content of Carnauba which is the reason for its long wear. Use liquid for renewing polish on floors previously waxed. Use paste on new or newly treated floors.

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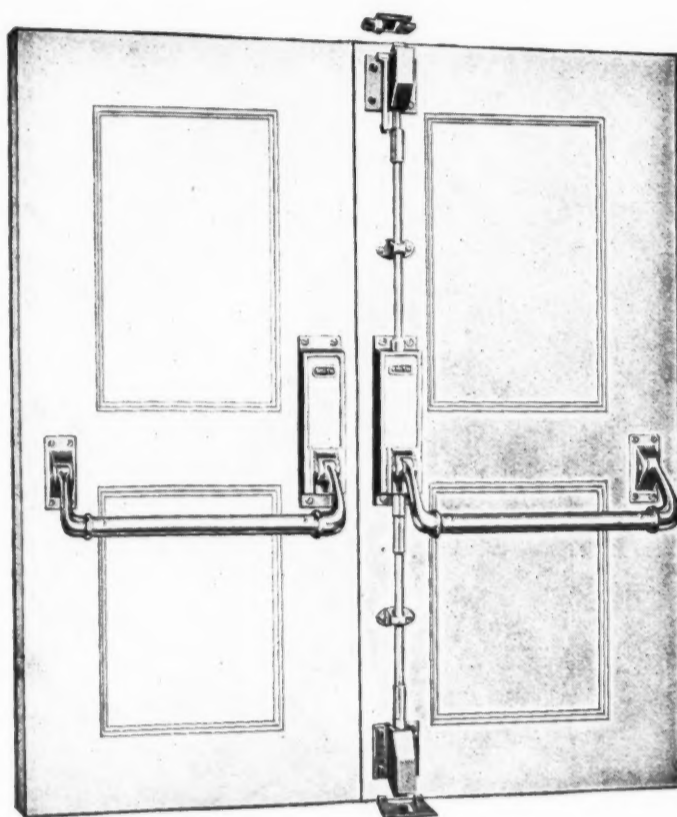
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Inside View
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No Outside Trim.

Bolts are operated by a slight pressure on the Cross Bar.

Bolts are not dependent on springs for opening or closing operation.

Simple but sturdy in construction and easily installed.

Will operate perfectly in connection with standard makes of door closers.

Catalogue No. 30 with Supplement "A" sent on request..

Manufactured by

THE STEFFENS-AMBERG CO.

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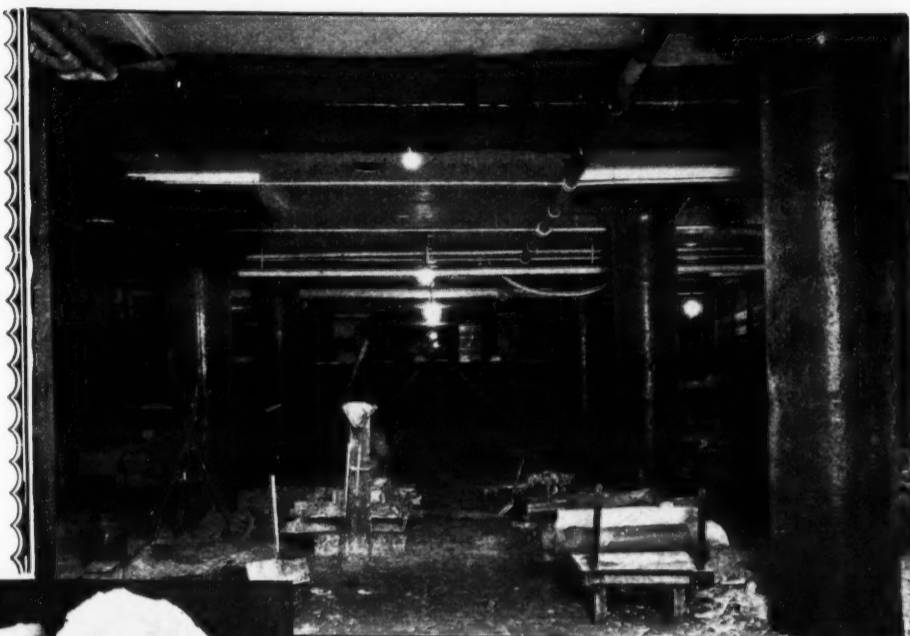
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FORE

—thought

AFTER

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BOTH mean Par-Lock, when applied to plastering permanence. The time to think about plaster cleavage, cracked and disfigured interiors is before the plaster is applied. If you think of Par-Lock, there will not be any cleavage to worry about.

But where plaster fails over large areas and it is necessary to remove and replace it, Par-Lock effectively prevents the repetition of the trouble. The illustration above shows the interior of a salesroom belonging to a large mercantile organization in which it was necessary to strip the plaster from the columns as well as large ceiling and wall areas. All such areas were thoroughly cleaned and Par-Lock applied by the local Par-Lock Applier, assuring not merely efficient plaster key, but protection against moisture, steaming, and expansion strains. There is a Par-Lock Applier in your territory, eager to give counsel on new installations, or replastering problems.

Par-Lock
Plaster-Key

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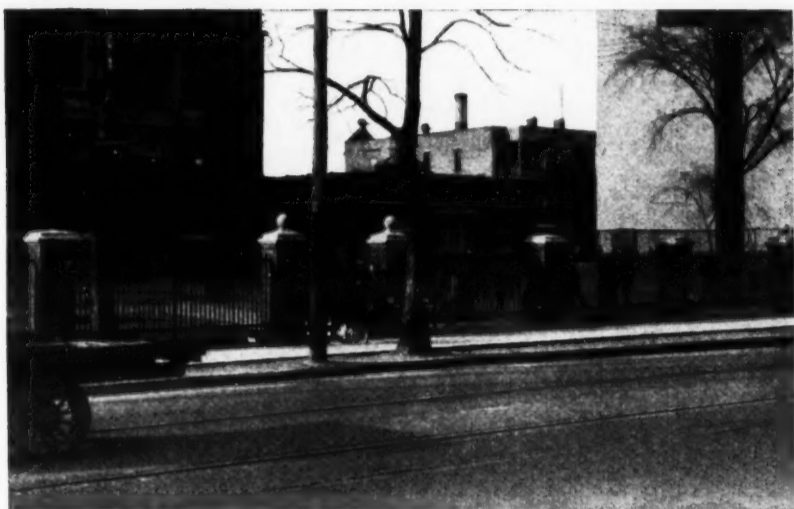
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SAFE at Recess Time



—and safely started home

When children run and play at recess time, they forget about boundary lines and passing cars. Only fence protection can insure their safety.

And when it's time to go home, children leave through centralized gateways where they can be escorted across the street. Many tragedies are eliminated in this way.

Cyclone Wrought Iron Fence not only provides dependable protection but also adds to the beauty and dignity of school premises. Economical in the long run because of its great durability.

Cyclone Fence is erected by our own trained men. We take complete responsibility for the finished installation. Prompt service everywhere. A Cyclone Representative will be glad to call and help you with your fence problems.

The Cyclone Fence Company is probably listed in your local telephone directory. If not, write direct to us.

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Cyclone Chain Link Fence

Many schools have provided protection for children by enclosing playgrounds with Cyclone Chain Link Fence. Made of copper-bearing steel, heavily galvanized.

All chain link fence is not Cyclone. This nameplate identifies the genuine Cyclone Fence.



Cyclone Fence

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CYCLONE FENCE COMPANY

SUBSIDIARY OF
UNITED STATES STEEL CORPORATION

General Offices: WAUKEGAN, ILL.

Branch Offices in All Principal Cities

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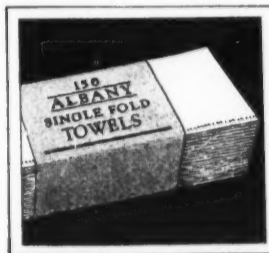


Protect the children's health

GIVE the children in your school real health protection. Equip your washrooms with A. P. W. Albany Victor paper towels—and make doubly sure of safe sanitary towel service. There's no danger to children's health with Albany Victors. They're unusual towels. Sterilized many times over. Big. Quickly absorbent. So soft-textured that they can't hurt the skin. Yet so strongly put together that they will do any drying job without tearing.

Children like to use Albany Victors—because they dry the hands better—and faster. One towel is enough for face and hands. With Albany Victors in your washrooms there's less waste, less untidiness too. Greater economy. And real protection for the children.

Install Albany Victor towels—and give the children the health safety they deserve. Cut your towel bills with this low-priced economy towel. Just mail the coupon today for prices.



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TOWELS

A. P. W. PAPER CO., Albany, N. Y.

ASBJ-4-30

Please send us complete information on how we can save money by installing Albany Victor towels.

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AT THE INCEPTION OF OUR BUSINESS

RUBBERSTONE



Asphalt Tile Flooring

Built like a Highway ~ for Wear

was considered a good name for our product. Made of asphalt, known in the trade as mineral "Rubber" and developed by a Mr. Stone—the combination of Rubber and Stone seemed a happy one.

But in time it became evident that Rubberstone frequently implied "rubber tile." During the last few years it has been necessary for us to continually explain, by word and by letter, that Rubberstone was an *Asphalt* tile....and bear in mind that Rubberstone pioneered the asphalt-tile type of flooring!

An unfortunate situation—which we now rectify. We are changing the name Rubberstone to

* HANOTILE



Asphalt Tile Flooring

Built like a Highway ~ for Wear

We are also changing the name of the company from RUBBERSTONE CORPORATION to

AMERICAN ASPHALT TILE CORPORATION

* The name HANOTILE is derived from the name of our President—Mr. GEORGE C. HANNAM

The product, the company personnel, distributors and business addresses remain unchanged. The Executive Offices will continue to be at One Madison Avenue, New York City.



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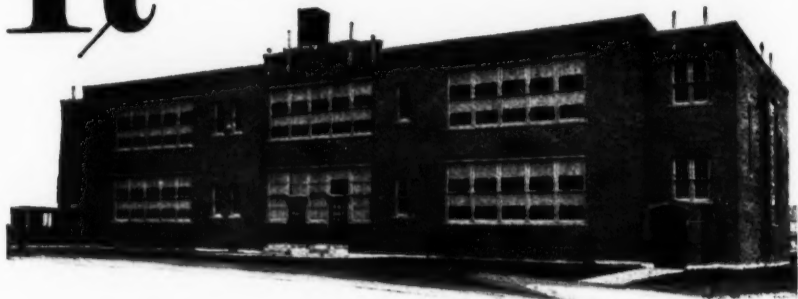
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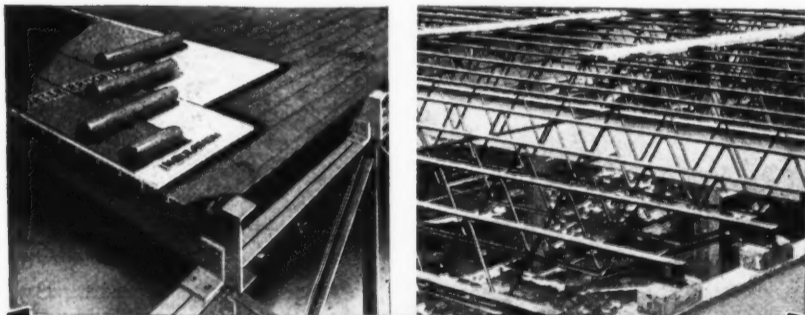
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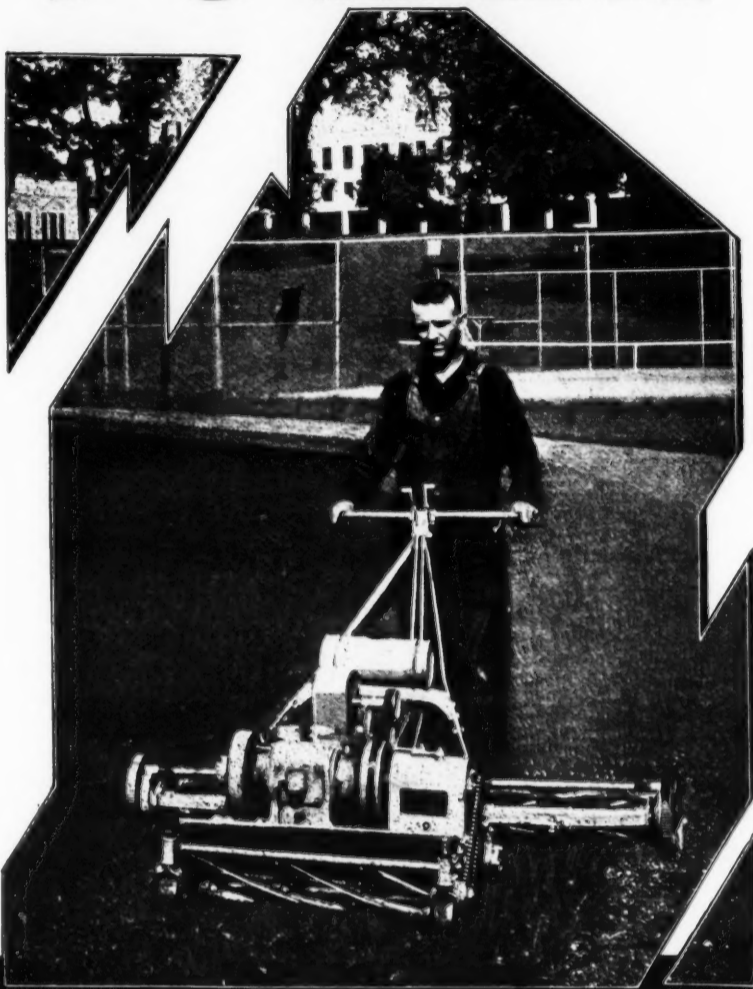
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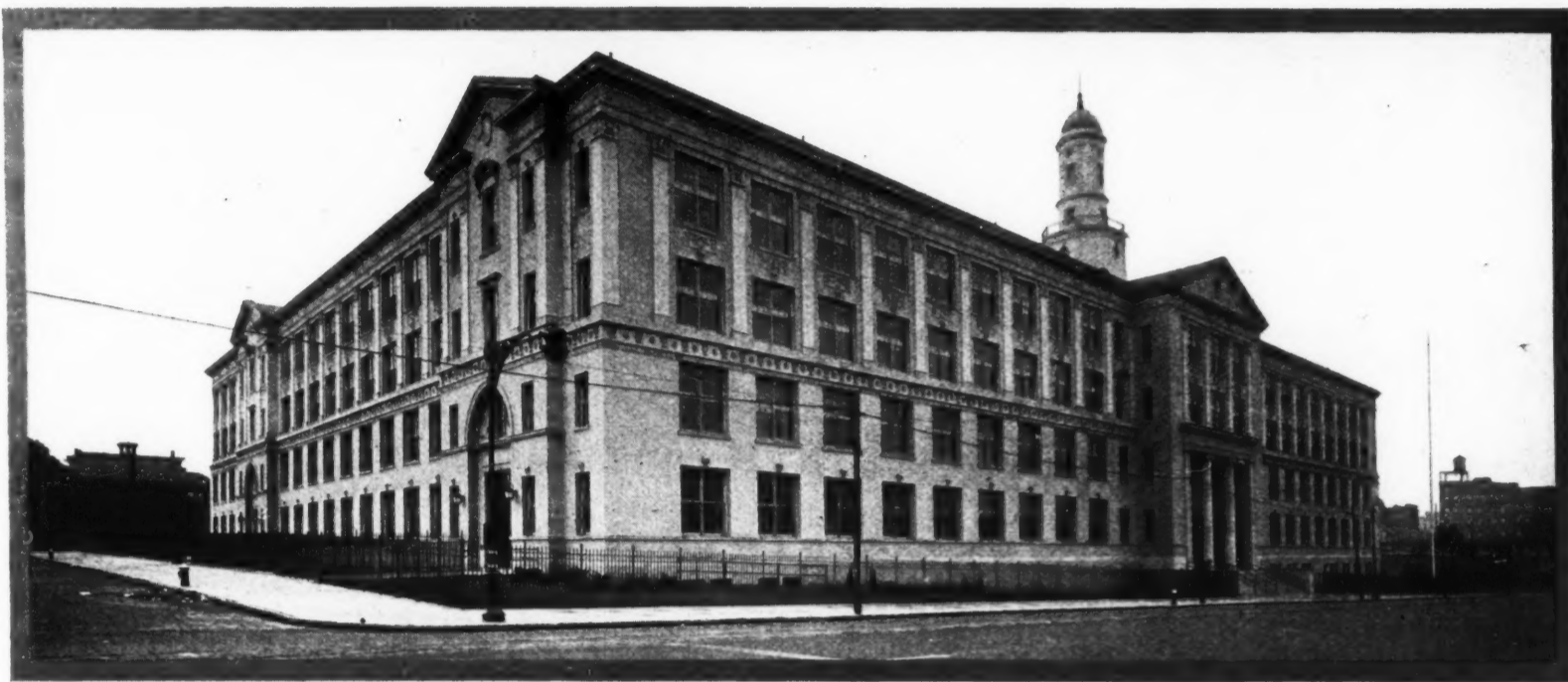
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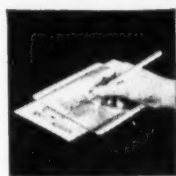
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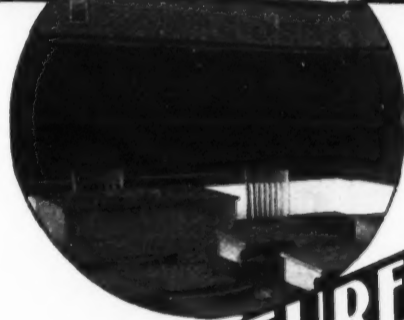
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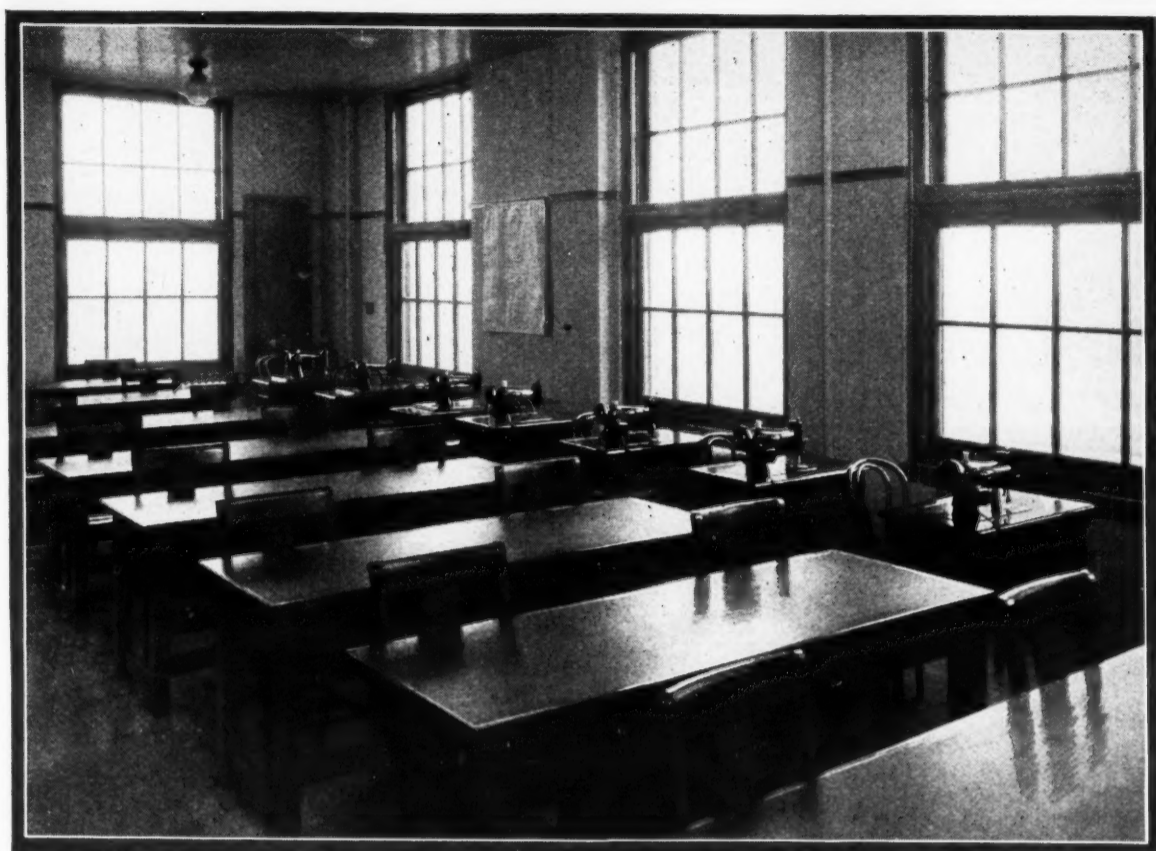
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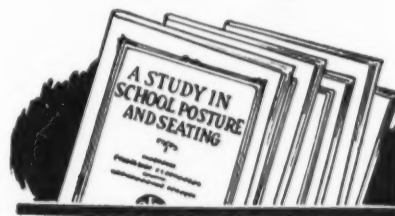
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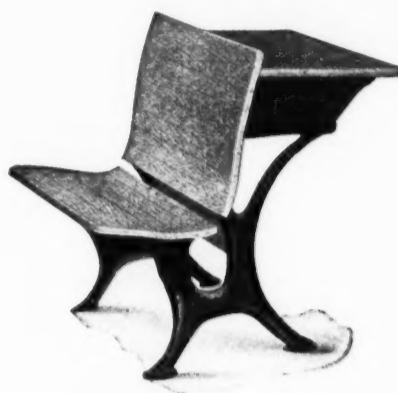
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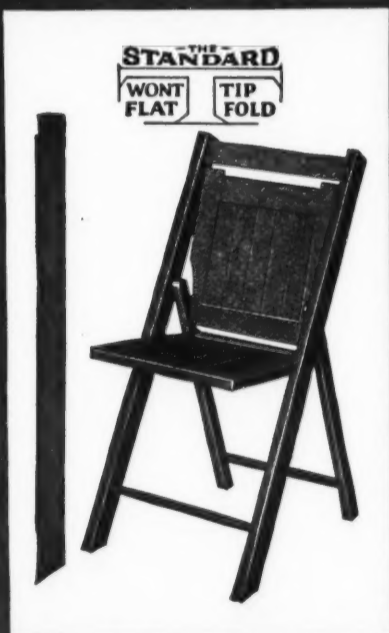
Below — Peabody Portable Assembly Chair Sections are built together — not simply individual chairs fastened to long section strips.



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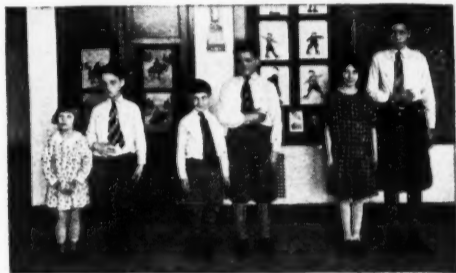
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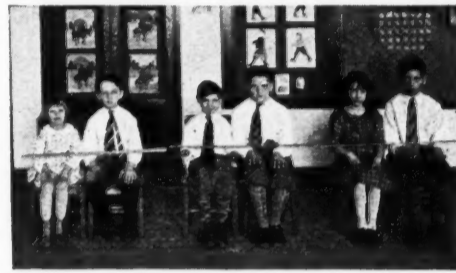
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Modern Schools Prefer this Improved Inkwell

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No breakage. The new, improved, all-hard-rubber Sengbusch Self-Closing Inkstand saves books and clothes. No school can afford to do without them.

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Adopted as standard by the business world. Millions in use giving satisfactory service. Simple to install. No special tools required. Further information will be gladly sent to you on request.

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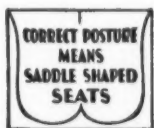
418 Sengbusch Building, Milwaukee, Wis.

Ask the Janitor

or whoever gets the repair jobs. He will tell you why a "Royal" installation is a lifetime installation. In construction, in finish and *in its solid wood-work*, "Royal" recognizes that repairs cost money even when done by the school janitor.



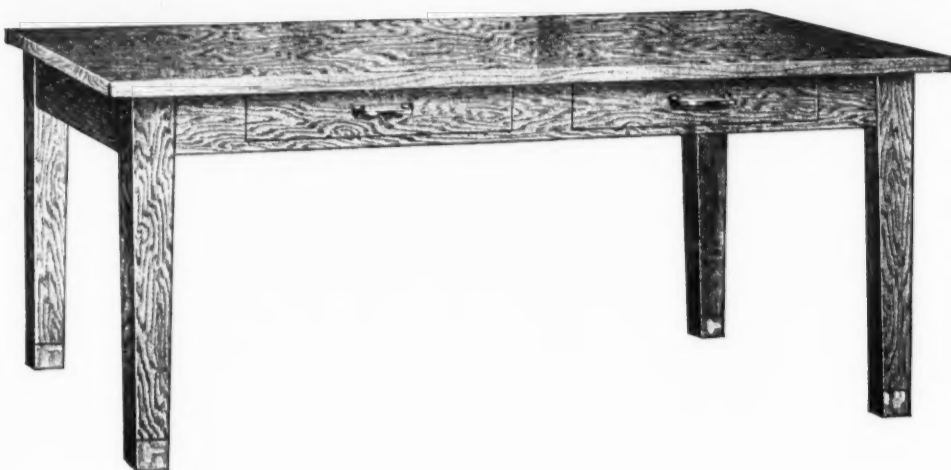
THE **Royal** CHAIR
"A Lifetime Chair"



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Manufacturing Company
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CHICAGO

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*We manufacture tables of all
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Office tables, Patented Folding tables and Dining tables
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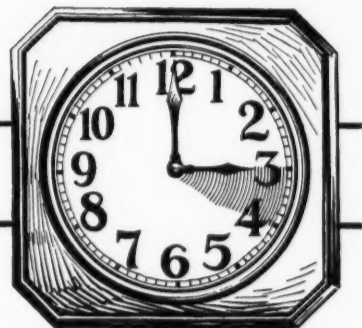
*Specially Adapted
for
School Purposes*

Frames furnished in any color
finish. Seats are of wood or uphol-
stered in imitation leather in
various colors.

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The Last Hour

The HARDEST TIME TO TEACH



It's the last hour when teachers are under greatest strain. It is then when children pay less attention to classes, do little things that worry the teacher and are restless, tired and uncomfortable. It is then when grades are lowest and teaching is the hardest.

Avoid last hour strain on the part of the pupils and nervous strain on the part of the teacher by equipping with **National Seats of Comfort** with the famous

MOESER EXTENDED ARM

Makes Teaching Easier

In National Desks, equipped with the Moeser Extended Arm, pupils sit squarely in their seats. The back is supported when writing—working space is more than doubled—no turning to rest arm while writing—eliminates facing light and uncomfortable positions that bring on "last hour uneasiness." When writing the arm is supported, resulting in better penmanship. National Desks are shaped to conform hygienically to the human figure—they encourage correct posture—insure greatest comfort—less fatigue—less eye strain—better grades in last period classes and less worry and nerve strain on the instructor.

No. 101. Combination Desk with Moeser Arm Top. Standards finished in durable, baked enamel; woods, in National process finish, both in a soft brown color.



Choose Your Seating By This 10 Point Test

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|----------------|----------------------|
| 1. Health | 6. Compactness |
| 2. Comfort | 7. Lasting Finish |
| 3. Convenience | 8. Harmonious Design |
| 4. Strength | 9. Simplicity |
| 5. Durability | 10. Sanitation |

Pedestal Desk with Moeser Extended Arm



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Years of collaborating with America's leading educators, together with our own exhaustive research and experiments, have resulted in equipment noticeably superior from the viewpoint of these 10 Major Tests for All School Seating.

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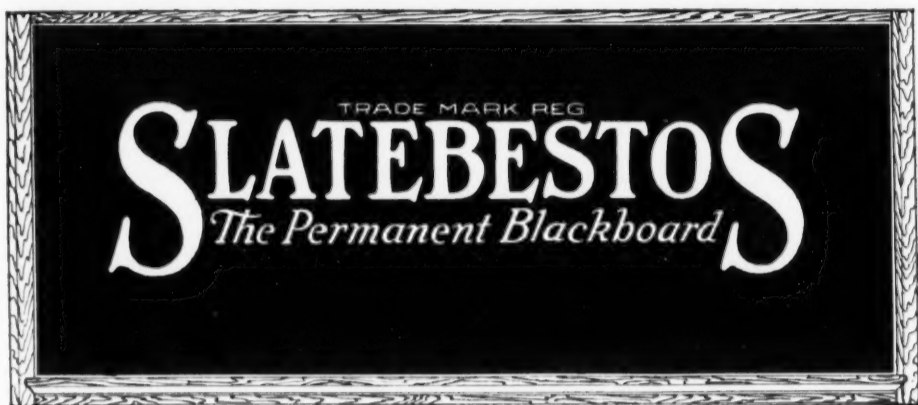
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Manufacturers of Complete School Equipment
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"The Blackboard that Improves With Use."

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CHICAGO

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**SIMPLEX BULLETIN BOARD
AND TACK STRIPS IN LONG LENGTHS**

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Disfigured walls, marred blackboards, and unsightly mouldings are a thing of the past when you install SIMPLEX—the Perfected Cork Bulletin and Tack Board. In addition to encouraging the display of drawings, pictures, specimens of work and other exhibits, SIMPLEX saves the cost of many a re-finishing job.

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| (1) Dries quickly | (7) Makes more copies with less ink |
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| (3) Intense black color | (9) Insures better letters |
| (4) Does not soften platen | (10) Costs less per letter in cylinder |
| (5) Flows freely through pad | |
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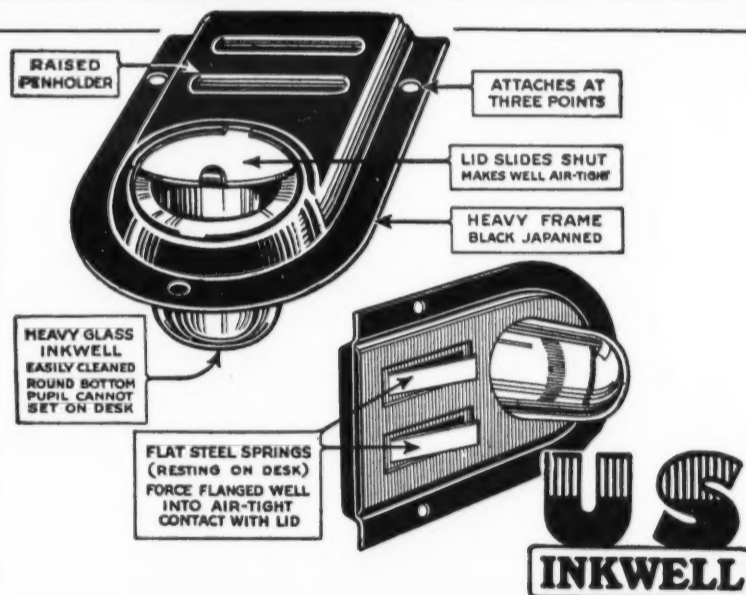
Pure White — Smooth — Strong — No Mixing —
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1. *Is it easy to install?*
Yes, just drive in three tacks.
2. *Will it fit our desks?*
Yes, it fits desks of any size.
(Made in two sizes—Sr., Jr.)

3. *Is it quiet?*

Yes, the lid does not rattle nor creak.

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Yes, because of low purchase cost and unusually long life.

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U. S. Inkwells are made and furnished with two size wells, one twice larger than the other. Write for samples of each so that you can see why it is much worth while to specify U. S. Inkwells—and determine which size best meets the needs of your school. You can get U. S. Inkwells from any school supply jobber or direct from our factory. Write today for prices and samples.

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DES MOINES, IOWA

"For Want of a Nail the Shoe is Lost"

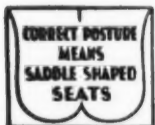


BENJAMIN FRANKLIN, patriarch, printer, inventor, and orator—believed that a chain was no stronger than its weakest link—that perfection was made up of many details.

Applying this philosophy to manufacturing, we find in the *Royal Folding Chair*, a product whose every detail is watched with meticulous care so that, completed, it embodies all essentials so necessary in a chair for school use—*Royals change tension to attention—and they are the strongest, too.*



THE *Royal* CHAIR "Another Lifetime Chair"



Seats of saddle-shaped steel, wood slats, wood veneer and upholstered.

Noiseless rubber or glider feet. Supplied singly or in sections of two or more chairs, as required.

ROYAL METAL
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CHICAGO



H. O. R. All Steel Structofold Chair with specially rolled steel frame that has the strength only possible where strains are scientifically distributed. The paneled back prevents buckling and adds to the dignified appearance of the chair. A perforated scroll seat, fitted to the body contours, permits comfortable and airtied seating, \$25.00. With steel slides, \$22.50. F. P. W., \$22.50. B. O. S., \$20.00 per doz.



FPW



BOS



INDESTRUCTO CORRECT
POSTURE MOVABLE
ADJUSTABLE DESK

The back and seat are curved to fit the body.
Nos. 1 and 2—\$5.25; Nos. 3 and 4—\$4.95; Nos.
5 and 6—\$4.65. Drawers, all sizes, 95 cents.

COLUMBIA MOVABLE
DESK



More widely used than any other.
Nos. 1 and 2, \$4.95; Nos. 3 and 4,
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Many patterns to choose from.

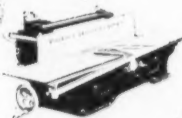
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makes all cuts at any
angle. Saw travels through work.

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PORTABLE MACHINES

MANUAL TRAINING BENCH No. 280



A GLANCE AT THIS NEW PATTERN will show that the combination of various sized drawers and cupboard makes an unusually practical bench. Notice, especially, the small drawer which is intended to hold nails, screws, small tools, etc., which so easily become misplaced when kept with the larger tools. Being able to immediately lay hands on these small but necessary items, will be the means of saving a great deal of time, thereby promoting efficiency. Also, notice the large cupboard, which will hold such tools and materials which cannot be kept in the general or three private drawers. Bench is equipped with our Abernathy Rapid Acting Roller Nut Vise No. 70D on front, adjustable stop and dog.

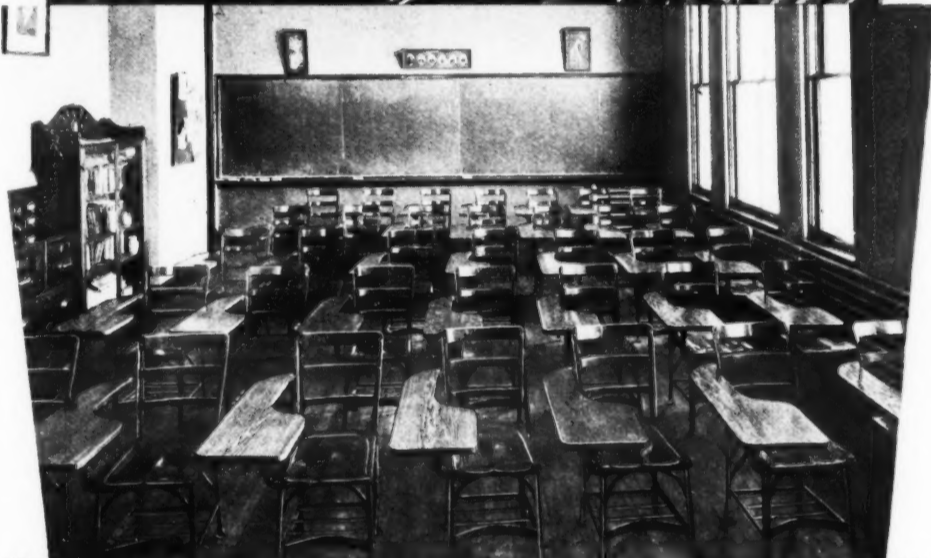
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Manufacturer of this line since 1898

2814-2842 West 26th St.,

Chicago, Ill.

... another **ANGLE STEEL** chair installation in a Michigan High School



A GAIN, ANGLE STEEL Tablet Arm Chairs prove their worth! These two installations—one in the chemistry laboratory, the other in an English class room—graphically portray the general utility of these chairs.

Durable, comfortable, convenient and economical—these chairs are all-purpose and adaptable to any required need. Note the broad arms, unusually ample in proportions for note work. See how the hardwood seat is formed in saddle style for greater comfort. Consider the value of the handy hat or book rack under the seat. Observe the backrest shaped to fit normal curvature.

Enduring economy, serviceability and absence from "time out" or repair costs are insured by the sturdy, rigid construction of ANGLE STEEL Chairs. Handsomely finished, too—wood parts light golden oak or mahogany—steel parts, a deep rich olive green enamel.

Invest now in permanence! Insure better seating and improved scholarship for your students! Write for catalog "C-ASBJ".

NO. 18 TABLET ARM CHAIR WITH NO. 1700 ARM (AS ILLUSTRATED)

Size of arm—12 1/4" wide by 27" long.
Seat—Hardwood saddle seat, 14 1/2" by 14 1/2" by 7/8" thick.

Back—3 piece steel back-rest firmly riveted to rear continuous posts.

Height—Seat 18", 17" and 16" from floor. Top of arm 26 1/2", 25 1/2" and 24 1/2" respectively from floor. With built-in book or hat rack.

No. 18WB same chair as above, except with two-piece wood backrest firmly riveted to rear continuous posts. Top piece 14"x6", lower piece 14"x3".

No. 19WB same as above except of heavier construction and feet are flared.

No. 1700 same as 18WB except with book or hat rack.

No. 1750 same as No. 18 except without book or hat rack.

No. 1800 same as No. 18 except arm size 9" wide by 23" long.

NO. 1900 TABLET ARM CHAIR

Size of arm—15" wide by 11 1/8" deep writing surface by 25 1/2" long over all.

Seat—Hardwood saddle seat, 15" by 15 1/2" by 7/8" thick.

Back—2 piece steel back-rest firmly riveted to rear continuous posts.

Height—Seat 18", 17", and 16" from floor. Top of arm 26 1/2", 25 1/2" and 24 1/2" respectively from floor.

Drawer—13 1/2" deep by 8 1/2" high by 11" wide, inside measure with handle opening on left side.

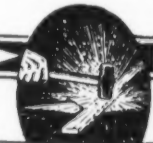
No. 1950—Same as No. 1900 except wood back-rests.

No. 2000—Same as No. 1900 except Tablet Arm size 21 inches wide by 11 1/8" deep writing surface by 25 1/2" long, over all.

No. 2050—Same as No. 2000 except has 2-piece wood back-rest.


We Also Make

- Chairs, Regular
- Stools, (with or without back)
- Typewriter Stands
- Adding Machine Stands
- Desks
- Shop Desks
- Wall Desks
- Tables
- Benches
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- Trucks
- Tenders
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- Pigeonhole sections
- Cabinets of all kinds
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Angle Steel Equipment

Permanence in Steel



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ANGLE STEEL STOOL COMPANY, Plainwell, Michigan.

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☐ Send catalog "C-ASBJ"

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Address.....

City.....State.....

By.....



CINOPLATE

Specially treated wood;
grainless; knotless; guar-
anteed waterproof.

CINOBESTOS

Long asbestos fibre;
and Portland cement.

CINOBOARD

Wood fibres special-
ly treated and kiln
cured.

From Kindergarten to Post-Graduate

Fulfilling every need of classroom, lec-
ture room, demonstration halls . . .
wherever it is necessary to put things
down *white on black*.

A tremendous opportunity for you to
cash in on our

EXCLUSIVE FRANCHISE
and liberal proposition.

Write or wire us today.

The Valleyco Company, Inc.

116-118 East Water St.,

Cincinnati, Ohio, U. S. A.

Reproduction from Vul-Cot Advertisement in System Magazine

Learn which offices in your city
are standardized on Vul-Cot waste baskets.
Your stationer can tell you. Note the names;
the kinds of businesses; the kinds of man-
agement those offices have.

Do a little thinking about it.

All the big companies, all the mod-
ern offices, small and large, are standardized
now on Vul-Cot—(except about 4%).

Their questioning and figuring are all fin-
ished now. When another waste basket is
needed, instantly they get another Vul-Cot
as a matter of course.

How does that happen? Each busi-
ness thought at first its own conditions were
different. Yet each of these users found in
the end that his own analysis and reasoning
led him straight and sure to the same deci-
sion that all these thousands of other users
had reached,—and to Vul-Cot.

Can You, and your office, and your
conditions be so different? All these others,
after going into it thoroughly, are convinced
they are getting real savings, gains, and ad-
vantages.

Isn't there a strong chance that YOU are
missing something?

It's a real gain, or the big com-
panies would not all be so unanimous.

If you're missing it, why shut your eyes?
Why not find out about it? Talk with the
purchasing man or office manager of any
big company.

Or get ONE Vul-Cot. Put it next to your
own desk. In 28 days ask yourself if it isn't
time every desk in your office had its own
Vul-Cot.

Vul-Cots are a product of National Vulcanized
Fibre Company, Wilmington, Del. Every real Vul-Cot is per-
manently name-marked. Look for it. Colors or wood effects
to match furniture. At Stationers.

Right waste disposal does affect business and profit; in many
ways. Look into it.

THINK IT THROUGH



NATIONAL DUSTLESS CRAYONS

are truly
Crayons of Character



Free of grit from tip to tip NATIONAL CRAY-
ONS respond perfectly to every stroke.

Being uniform in strength, every piece of
NATIONAL CRAYON will withstand a firm grip
of the fingers without danger of breaking or
crumbling.

The dustless feature, combined with uniformity
in all other respects, makes NATIONAL the
ideal crayon for the classroom.

Your regular school supply dealer
can serve you. If not, write direct.



THE NATIONAL CRAYON CO.
West Chester Pa.



WRITE FOR OUR
SCHOOL SUPPLY
PRICE LIST

SANFORD'S Inks and Paste for Schools

FOR 70 YEARS
"SANFORD'S"
HAS STOOD FOR
HIGHEST QUALITY

THIS INK WILL NOT THICKEN IN WELLS

Sanford's School Black Ink is a black aniline ink and is especially satisfactory for general school purposes. It will not thicken in the ink well. It writes a deep black and dries black.



No. 711—Quart

BLUE BLACK SCHOOL INK



This ink writes blue and dries black. It is a very serviceable school ink—permanent, and most satisfactory for composition book use.

A Reputation Merit has Won

Sanford's Products have been used in schools for three generations, and have established, by merit and service, a reputation known to all School Supply Buyers, for highest quality.

In supplying their schools with Sanford's Inks and Pastes, buyers take no chances—they know they are getting the best quality products on the market.

SANFORD MANUFACTURING CO.
CHICAGO NEW YORK

BEST INK FOR SCHOOL OFFICE Writes Bright Blue Turns Jet Black



Sanford's Premium Writing Fluid is the ideal ink for use in the school office, as well as in all business offices and homes. It writes a navy blue, which is easy to read, and in a short time turns to an intense and permanent black. It has defied time for over 70 years.

For all records where absolute permanency is required, use Sanford's Premium Writing Fluid. It never fades.

ECONOMICAL SCHOOL PASTE IN FOUR SIZES

Sanford's School Paste is a white, clean paste, put up especially for school use. Its quality is vouched for by Sanford's, and its price makes it the most economical to use. There are four sizes: No. 751—Quarts; No. 752—Pints; No. 755—Gallons; also in half gallons.



LIBRARY PASTE

Sanford's Library Paste sticks instantly and holds. It remains soft and moist indefinitely in the water-well package. Never stains. Is the most satisfactory paste for the office of the school.



CLARIN CHAIRS are made of steel (excepting seat and rubber floor contacts) and will not mar the finest floor nor damage the most delicate floor covering.

THE IDEAL FOLDING CHAIR

is a sound investment
as every user testifies!

*A sample tells the story without
exaggeration — let us send one!*

Clarín Mfg. Co., 4640 W. Harrison St., Chicago, Ill.

Please send by parcel-post prepaid—sample CLARIN CHAIR, finish and seat as checked.

☐ Brown (walnut) ☐ Battleship Gray ☐ Wood Seat
☐ Maroon (mahogany) ☐ Olive Green ☐ Leatherette Seat

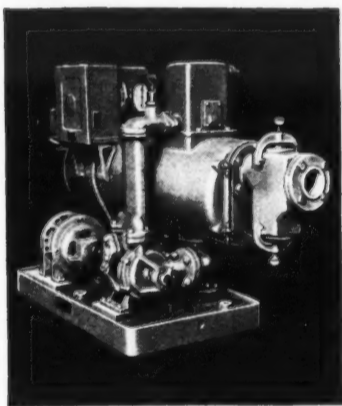
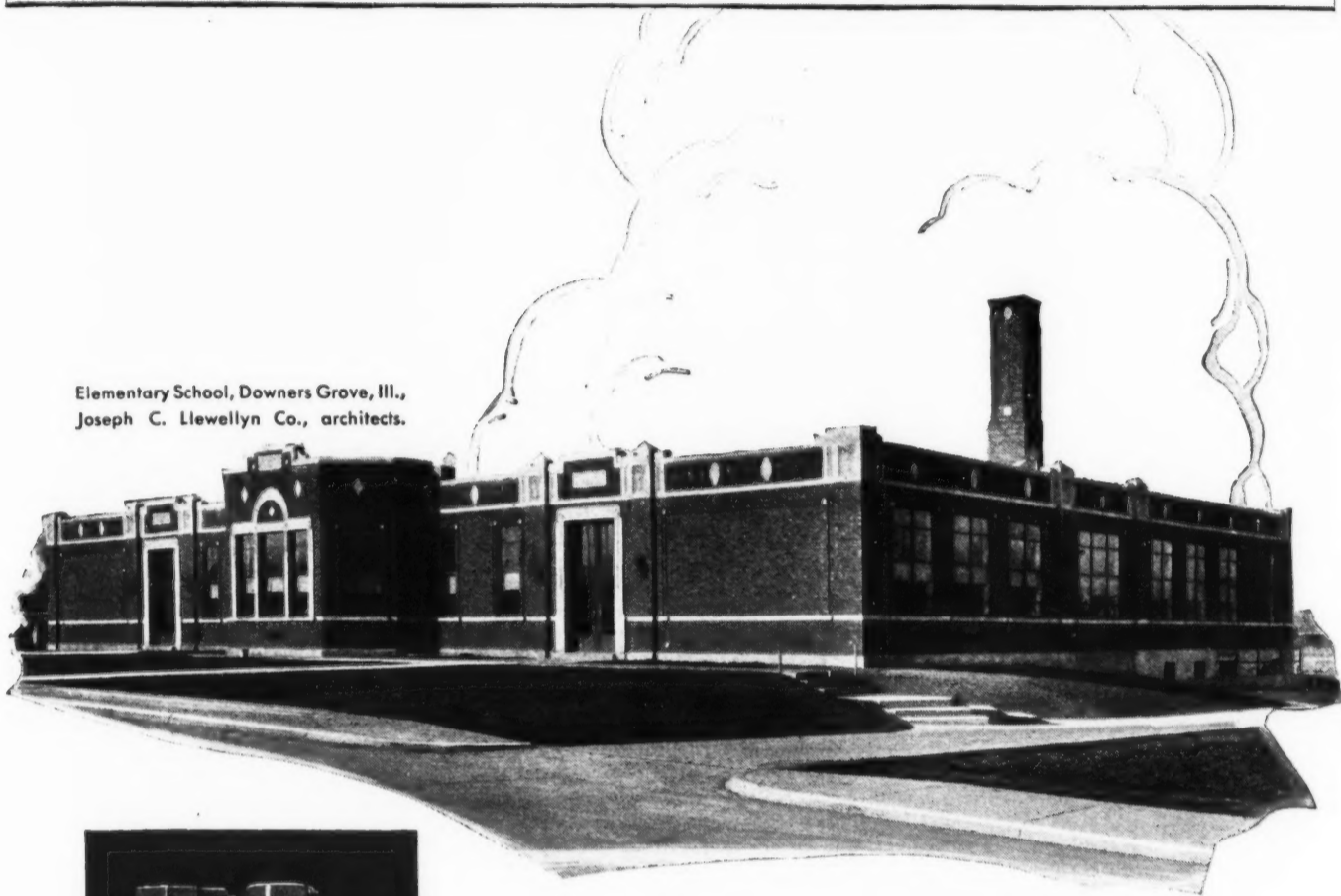
We will either return it or pay for it after a reasonable trial.

Signed.....

Address.....

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Elementary School, Downers Grove, Ill.,
Joseph C. Llewellyn Co., architects.



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—in this grade school

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 *Pumps*

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THE AMERICAN School Board Journal

APRIL,
1930

Eastern Office:
342 MADISON AVENUE
NEW YORK, N. Y.

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CHICAGO, ILL.

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The Bruce Attendance Bulletin

"Is Superintendent Soldan of St. Louis here? I want to meet him!"

"I don't know," was the answer. "Ask Mr. Bruce over there. He probably knows."

It was in 1904. The annual meeting of the Department of Superintendence was in session at Atlanta, Georgia. Some 600 schoolmasters were in attendance. The questioner was brought in touch with Superintendent Soldan. A bookman, standing in the hotel lobby, remarked:

"Mr. Bruce, you seem to know everybody around here. Why don't you print a list of all those in attendance at the convention?"

"Good idea!" was the reply. "But that means a lot of work, and a bit of expense. My means are limited."

"You can readily sell the attendance lists at five or ten cents a copy," explained the bookman. "The receipts will cover your expenses!"

"Well, I'll try it, and start right now," I said. "But the distribution of the printed lists must be free of charge to everybody!"

Here was the beginning of the *Bruce Attendance Bulletin*. The first issue was a success. Every delegate wanted one or more copies. The nickels and dimes offered in payment for the bulletin were declined. It became obvious that the bulletin served a useful purpose. Secretary Irwin Shepard was delighted.

Thus, the *Bruce Attendance Bulletin* has been issued year after year, during the meetings of the Department of Superintendence. The service thus gratuitously and unselfishly rendered met with appreciation. Those in attendance not only wanted to know all the names of those present, but they wanted the folks back home to know the import of the great educational gathering.

The attendance grew with each year. The recent Atlantic City meeting registered over ten thousand. The *Bruce Attendance Bulletin* increased in size until it became a monster publication. Its service and utility must be measured in proportion to the attendance.

In speaking of the origin of the *Bruce Attendance Bulletin*, and its subsequent annual appearance, we simply wish to add that it represents our contribution to the efforts of the great educational body whose labors in behalf of the nation are so enthusiastically and efficiently performed. The bulletin is not a commercial enterprise. It constitutes a service cheerfully, earnestly, and unselfishly rendered.

WILLIAM GEORGE BRUCE

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The contents of this issue are listed in the *Education Index*.



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"STANDARD MAKES EVERY MINUTE COUNT"

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THE EDUCATOR'S NEXT TEXTBOOK—TAXATION

Tommy Does to Others

Muriel Stafford

Rain. It must have been raining a hundred years. Tommy couldn't remember when it had started or how sunshine looked. He pressed his small nose against the schoolroom windowpane and sighed forlornly.

Red umbrellas, black umbrellas, green umbrellas, blue umbrellas bobbed along beneath the window. They were all going home, but he couldn't go home. He had punched Ettore in the stomach at recess. Hard. His face lightened a little as he remembered how hard.

"Sit down in your seat, Thomas!" Teacher had come back. He recalled his disgrace and sank into his seat, unhappily. Teacher regarded him gravely, thoughtfully, and then she called him to the desk.

He walked up to her, eyes averted, mouth set.

"Why did you hit Ettore, Tommy?"

"He-he hit me."

"He didn't hit you first. That wasn't why." Silence.

"Look at me, Tommy."

He attempted to do so, but vainly.

"Tell me why you hit him."

"I guess I — wanted to."

"Don't you like Ettore?"

Tommy's apathy vanished, and he blazed into righteous indignation.

"Nah! He kicked my dog. Yesterday after school he kicked him."

"Ettore, did you kick Tommy's dog?" asked Teacher, sternly.

Ettore lifted woebegone black eyes.

"He was a bad dog, Ticher. He chase' my little brudder Pedro from the kindergarten, and he jumped on him and get him all mud and scaren him so he cry!"

"You are both naughty boys," said Teacher. "Would you like to be kicked Ettore? Then why should you kick a poor little helpless puppy that was only playing? I am ashamed of you, Ettore, for doing such a thing. . . . And you wouldn't want to be struck as you struck Ettore, would you, Tommy? Look at me, both of you. Whenever you start to do or say anything, always think first whether you would want someone to do it to you."

It had been a long day. Teacher watched them go wearily. This eternal moralizing! And they never heard what you said to them!

Tommy and Ettore were trailing out into the drifting rain in silence. Ettore was the first to speak.

"I shouldn' uv keek Prince so hard, mebbe," he conceded, grandly.

"Yeah!" snorted Tommy. "Maybe! You know darn well you shouldn' uv kicked him at all!"

"At all! At all!" Ettore stopped in the middle of the road, angrily. "He was bad! He scare' Pedro!"

"My dog is not bad!" flared Tommy. "Pedro is a cry-baby, tha's what he is, a cry-baby!"

"You call my brudder a cry-baby? How you like I call your brudder a cry-baby?" demanded Ettore, virtuously.

"Well, how'd you like it if I called your dog bad?" retorted Tommy.

Ettore smiled, a superior and maddening smile.

"I got no dog. You gotta brudder. So!"

Tommy frowned, disconcerted. Teacher hadn't said anything about a case like this. It wasn't fair.

Ettore turned down his street, still triumphant. Tommy went on, considering.

Teacher looked very happy the next day. She had on a pretty blue dress and she smiled often. Perhaps that was because they were going to

the museum in the afternoon. At recess Tommy went over to her, a bit uncertainly.

"Westpoint!" she was saying to Miss Crowell, "And perfectly stunning, Rena! . . . Oh, yes, Tommy?"

"Teacher, Ettore says he can say my dog is bad because he ain't got no dog."

"Tommy, you mustn't use 'ain't got no'" responded Teacher, absently. "Why did Ettore say that?"

"Because you told us it was all right to say something if you didn't care if someone said it to you."

Teacher knit her brows. "I see. Ettore didn't understand. You must think how you would feel if you were in the other person's place, dear. Then do the kindest thing there is to do."

She smiled at him, and went on talking to Miss Crowell.

"Oh," thought Tommy. "Make believe, she meant."

In the afternoon they all gathered with their hats and coats on to go to the museum.

"Of course you are all going to be lovely children," Miss Holton was saying. "Remember, don't go too near anything. Suppose somebody touched a beautiful picture and smudged it, or brushed against a statue or a vase and it broke! I'm sure I don't know what would happen to him!"

Everyone looked properly impressed.

"He'd have to go to prison," nodded Bernard whose father was a policeman.

They tiptoed around the museum so carefully that Tommy felt as if he were in church. Some of the pictures looked like church pictures, too. There was one of a beautiful lady with a baby in her arms and other little babies' faces looking at them. Teacher said the babies with only faces were angels. The lady wasn't standing on anything, and Teacher said:

"Where are the beautiful Madonna and the Child coming from, children?"

Nobody knew, but Charlotte always made believe she knew everything, and she put her hand up. When Teacher asked her she said, "Ah-h — New York!" and Teacher was cross because they were from Heaven.

"Look, Ettore!" whispered Tommy. "Look at the horses! Gosh, its all fire in back of them!"

"One guy is fall' off his horse!" whispered Ettore, excitedly. "They all ride fast, to fight, mebbe!"

They lingered, spell bound.

"Hey, look out!" warned Tommy. "There's a policeman coming that's awful big. He'll take us to prison if you touch anything."

They turned away, but Tommy threw one more look at the policeman. He looked different, somehow. Perhaps he was the head of all the policemen. Why, he was coming right over! Tommy searched his conscience diligently.

"I'm looking for Miss Holton," said the policeman. "Do you know where she is?"

Tommy was horror-stricken. Gee! He'd hate to be Teacher. She must have done something awful! He opened his mouth to gasp that she had gone to the bus with the children — and then he remembered! Make believe, and do what you'd want somebody to do for you!

"M-Miss Holton? She went home a long time ago!"

"Home!" exclaimed the policeman. "Are you sure?"

Tommy nodded. His voice had left him.

The "policeman" walked across the gallery, frowning.

"You tell the p'liceman a lie!" accused Ettore. "Now he'll get you!"

"Come on," said Tommy. They fled.

Teacher was standing by the bus waiting for them. She looked troubled, Tommy noted. Um-m-m. She had a good reason if she only knew!

He heard her say to Miss Crowell, "I feel very badly about it, Rena, but we'd better go along now. I really don't know what else to do."

Perhaps he'd better tell her. She was worrying like anything. He touched her elbow.

"Yes, Tommy? What is it now?"

"It's all right, Miss Holton! I fixed it, but we better go quick!"

"Fixed what, dear?"

"The p'liceman. He came around looking for you, but I told him you'd gone home, so he stopped looking."

Teacher caught him by the shoulders and shook him a little.

"Policeman? Are you sure he was a policeman?"

Tommy's assurance wavered.

"Why-why he looked like a policeman. He had things on his shoulders, though, and a kinda funny belt."

"Tommy!" Teacher was looking at him in the queerest way. He couldn't tell whether she was going to laugh or scold him or what. "Where did you see him?"

"In the room where there was the picture of the lady coming from Heaven."

Teacher turned to Miss Crowell.

"As I live, it must have been Stanley! If I don't find him I'll call the Lincoln. He's staying there."

And she was gone.

Miss Crowell was laughing right out loud. Tommy felt bewildered and uncomfortable. He turned slowly toward the bus, and Miss Crowell caught his arm.

"Tommy, you are priceless!" she exclaimed. "But — you mustn't tell lies!"

He looked so unhappy that she added, "Don't worry, dear. He wasn't a policeman, at all. He was a soldier."

Tommy's blue eyes widened and widened. A real soldier! And he had lied to him. His dejection was complete.

"So! What'd I tell you about lies!" triumphed Ettore.

How could he know the man was a soldier? He had only done what Teacher said to do. Whatever he said would have been wrong, he brooded. It was all very puzzling.

"Come here, Tommy." It was Miss Holton. The soldier was standing by her, and they were looking at him. Poor Tommy wilted and then he straightened. A soldier wouldn't be scared; if he did something wrong he'd say so! He walked over with his shoulders squared and his blue eyes looking straight ahead. But he didn't breathe much.

"Are you the little boy who told me that Miss Holton had gone home?" asked the soldier.

"Yes, sir!" Tommy lifted his eyes pleadingly. "Gee, I'm awful sorry. I don't tell lies. Honest, I don't!"

The soldier looked at the earnest up-turned face, gravely.

"You did it for Miss Holton, didn't you, sonny?" he asked.

Tommy nodded, speechlessly.

"You mustn't do anything wrong, even to save somebody else, Tommy. That was where you got mixed."

So that was it! He took a deep breath and felt things clearing up.

"Yes, sir — I mean, no, sir!"

The soldier grinned.

"Let's shake on it!" he said, holding out his hand.

((Concluded on Page 141))

The Radio Takes on Education

L. W. Reese, State High School Supervisor, Columbus, Ohio

New tools of education find their way into the schoolroom with impressive constancy, affording each passing generation distinct advantages in orientation and adjustment to the world life with which it is related. Visual aids, for instance, have only recently established themselves as important adjuncts to classroom instruction. More recently still, educators have been exploring the field of radio to determine its adaptability to the educative processes, and the sponsors of "radio education" are happy in the hope of soon seeing their dreams translated into authenticated educational procedures. Some of its supporters, perhaps, wax overenthusiastic about its merits, while the pessimistic profess to see in it a menace to real education. In this two-article series, the writer will present a clear picture, beginning with a history of radio education in the United States, and concluding with an exposition on just what is taking place in Ohio.

The Ohio school of the air is perhaps the first successful venture in the use of the radio for schools supported in large measure by state funds. Ohio's venture is not a real pioneer effort, for many other agencies have developed one phase or another of the idea; and some of them with considerable success.

In the first article we shall tell the history of radio education up to the time it was started as a public-school proposition on January 7, 1929, in the State of Ohio.

In the year of 1920, stations WWJ, Detroit, and KDKA, Pittsburgh, began broadcasting educational features. It is interesting to note that from the start these two stations presented educational programs and have continued to do so.

One year later the Radio Council of the Payne Fund proposed to the United States Office of Education that it undertake to broadcast educational programs to the public schools of the United States. The Commissioner at that time, Dr. Tigert, felt that there was need for such an educational program, but stated that there seemed to be some sentiment against the procedure—too much federal control. He asserted, however, that the Office was willing to aid in this venture. In his Biennial Survey of Education for 1920-22, he reported that 60 educational institutions were broadcasting educational and musical programs, and that among these were 47 colleges and universities. He also stated that there were between a million and a million and a half receivers in the United States and from three to four million listeners, and that most of these were of school and college age.

In a definite quotation he stated, "Radio has the advantage of intimate contact between the speaker and his audience." Later he said, "The school, the library, and the newspaper are unusually ranked as the three great educational agencies. The radio promises to take its place as the fourth, and it appears to be fast fulfilling that promise. . . ."

Educational Broadcasting Through Educational Agencies

One of the first institutions to plan and carry out a broadcasting program was Grove City College, Pa. In the issue of the *Literary Digest* for May 13, 1922, there appeared an article entitled "College Lectures by Radio," which dealt with the broadcasting being done by the universities of Iowa, Nebraska, and Wisconsin. This was probably the first recognition given to educational broadcasting through educational agencies.

The Massachusetts Bureau of Education, Division of University Extension, may be given credit for being the first organization to give real educational courses by radio. During the four years following September, 1923, 21 courses of 8 lessons each were given by educators from Station WBZ. The speakers were paid for their services, and the expenses were met by enrollment fees sent in by persons who followed the course of study. For lack of these courses a syllabus was written for each student, and provisions were made for proper recognition of the student taking the course. In the four years over 4,000 students were enrolled in these courses, and 34 states and 6 Canadian provinces were represented in the student body. It is interesting to note some of the courses: household management, appreciation of music, American literature, French, business psychology, real estate law, backgrounds of English literature, and psychology of personal problems.

The New Jersey schools used the radio even before the general broadcasting era. The students in manual training and science made the radios. The cause of radio education was aided by the Montclair board of education with a gift of a transmitting station. The number of sets built in the state in one school year was reported to be over 4,000.

The Buffalo schools built and operated a broadcasting station. On February 5, 1926, their first program was broadcasted from their own homemade transmitter. The students and patrons were very enthusiastic over this venture.

The First Schools to Offer Radio Instruction

The Haaren High School, in New York City, from the evidence at hand, has the honor of being the first public school to give instruction by radio. This was in 1923. In 1924, the board of education of New York City printed a pamphlet of 254 pages, containing the reports of its educational activities carried on over the radio in coöperation with WJZ and the Radio Corporation of America.

In the year 1923, Mrs. Grace C. Stanley, commissioner of elementary schools in California, had radio programs presented for the benefit of the rural schools in her state. The topics dealt largely with California history. Another early experiment was made in the Oakland schools in California in connection with Station KGO. Courses were given in:

1. Counseling of classes entering the high school
2. English
3. Geography
4. Literature
5. History
6. Arithmetic
7. Penmanship
8. Physical training

Each lesson covered a 20-minute period with a prelude of five minutes of music. These programs were received with considerable enthusiasm by pupils, teachers, and the public.

Most educators are familiar with The Little Red Schoolhouse, a radio venture, in Cook county, Ill. Talks were given from week to week on agricultural topics, and speeches were delivered by State Superintendent Francis B. Blair, County Superintendent Edward J. Tobin, and other educators. Students in the schools also had an opportunity to appear before the microphone in the broadcasting of music. Some papers by students were presented. Mr. Tobin should be given credit for developing concrete ideas about the future use of the radio in the field of education. He believed that we should have public stations for educational purposes, rather than to rely upon commercial stations.

He felt that among the subjects that could best be taught by radio were music, light gymnastics, stories, geography, and history. He also felt that these programs should be of short duration, and that the teachers and pupils should be informed in advance concerning the radio lessons. The success of these school programs was so outstanding that an effort was made to interest the National Education Association. Mr. B. H. Darrow, who was in charge of the Children's Hour for WLS, Chicago, presented the values of educational broadcasting. The National Education Association had no committee to work on this definite project, but reported that it was pleased to see such steps being taken and felt sure that radio would become an increasingly important factor in the daily life of the people of the United States.

October 5, 1925, marked the beginning of broadcasting by the Kansas State Agricultural College, with Sam Pickard in charge. Not only were radio lectures presented, but these were supplemented by home study and examinations. Credits were also given. At nine o'clock each morning a special program was given for the children in the rural schools. This program consisted in the main of opening exercises, music lessons, talks on birds, travel, biography, books to read, and current events. Agriculture was not slighted. High-school courses were presented and credit given. The disheartening feature was the lack of radio-receiving sets. This was in large measure overcome by instruction on how to build radio-receiving sets. Mr. Pickard soon left Kansas to take charge of the radio activities of the United States Department of Agriculture.

In the South, Mr. Willis A. Sutton, superintendent of schools, Atlanta, Ga., became interested in the possibilities of education by radio. In a report, October 26, 1926, he made several interesting observations.

"Radio has been installed in all of the schools of the city and is being used for specific grades in the auditoriums and classrooms every day of the week. A 30-minute period is set aside for the use of the radio in the schools.

"An executive committee composed of the superintendent, supervisors, principals, and teachers prepares the programs for two or three weeks in advance. These programs are published in the daily press and all the schools and individuals of the state listen in.

"The program as carried out has been eminently successful. Every child in the Atlanta school system has had the opportunity to listen to at least one radio lesson every week. In addition the radio is used for weekly faculty meetings of the entire teaching force. In this way the superintendent and supervisors can speak to every teacher without the difficulty and expense of assembling at some central point.

"At 6 p.m. a program for the parent and child is put on. Prominent speakers, entertainers, and musicians are employed. Thus far the entire program has been a decided success, giving pleasure, information, and interest to the whole school program.

"The fact that the parents can listen in to the children's program and to the program for teachers and parent-teacher associations disseminates information about schools throughout the city in such a way as we have never known before. In fact, it gives the opportunity to teach the entire city.

"Another very decided advantage is the fact that the superintendent and supervisors can speak instantly to the entire teaching force. There is a unifying power in this method of procedure that is given a solidarity to the entire system."

The state superintendent of schools for Arkansas, Mr. A. B. Hill, in his report covering the years 1923 to 1927, made the following statement:

"Mr. Matthew (state supervisor of vocational agricultural education) finds the radio a valuable asset in his work. Many of the schools under his supervision have radios, and all that is necessary for the teachers and students to do to get the message from the supervisor's office is to tune in at the stated time and receive it simultaneously. It is possible, with this hook-up, for the supervisor to visit all of the 112 Smith-Hughes centers at one time."

In the year 1927, Mr. Stewart Byron Atkinson, principal of the Upton, Mass., high school, presented a thesis on "Radio in Secondary Education. This thesis, now on file in Harvard University, states three aims:

1. The determination of the present status of the radio in the field of secondary education.
2. The critical evaluation of
 - a) The radio machine as an object to be studied from a science standpoint
 - b) The radio program as a source of education
3. The suggestion of possible and probable lines of advancement in the future use of the radio.

Fifty-seven schools that replied to his questionnaire stated that they had radios and 123 that they had none. In 28 schools, sets had been purchased, and in 29, sets had been made in the schools. He found that many of the schools did not make use of the daytime programs to any great extent. High schools in the main were not especially interested in what was being offered through commercial stations. He found that the high-school principals desired talks by leaders in education, business, science, and other fields; also plays, music for assemblies, discussion of current events, talks by college officials regarding their institutions, glee club contests, debates, and dance music for school socials.

Mr. Atkinson's conclusions did not favor the use of the radio to conduct public-school courses. Perhaps this is based on the fact that eminently desired educational programs were not deemed accessible.

The Connecticut State Board of Education in September, 1926, with the assistance of WTIC, The Travelers' radio station, began a course in music appreciation. This course was suggested by Mr. N. Searle Light, director of rural education. A committee of outstanding educators was formed and this committee outlined the course. Lesson leaflets were used by 100,000 pupils in five states. This course cost \$10,000 and was considered successful. In 1928, talks were given on biological and physical-science subjects. The report from listeners showed that there was a falling off in numbers compared with the previous year. It showed that listeners were more interested in music, drama, or exercises than in speeches, although the speakers possessed special ability in their respective fields.

The Damrosch Programs

Perhaps the best-known broadcasting program in the field of music today is the Damrosch concerts. The Radio Corporation of America, in the spring of 1928, announced that Mr. Walter Damrosch, well-known director of the New York Symphony Orchestra, would present over the radio for the schools of this country a series of concerts with timely talks. These programs were broadcasted over the National Broadcasting Company and associated stations. It was found at the end of the school year 1928-29, that there was an audience of from two to five million. This unique program showed remarkable success and brought to light the fact that a national system of broadcasting, brimful of outstanding talent, will attract the attention of millions of people.

A single sentence will serve to state the significant difference between the educational use of radio in England and in our country. Radio

broadcasting in this country grew through local stations, while in England the government took control of this industry in its infancy and held the control with a very firm hand.

If space permitted, an interesting summation of the radio situation as it pertains to education at the end of the school year 1928-29 might be presented. Suffice to say that the Payne Fund sent a letter to the officials of all national, sectional, and state organizations in the United States who were known to be interested in education by radio. The following is an excerpt from this letter:

"Will you please tell us of anything that has been done by your organization, or by any member of it, to make education available, by means of radio, to pupils in schools, colleges, or universities? A very brief statement, with references to sources of detailed information, will enable us to give credit where credit is due."

The following national organizations were found to be interested in radio education in many ways. (The names of these organizations are given because they will be valuable to school executives who desire information pertaining to their specific fields.)

American Academy of Political and Social Science
American Art Bureau
American Association for Adult Education
American Association of Agricultural College Editors
American Association of College News Bureaus
American Association for the Advancement of Science
American Association of Museums
American Chemical Society
American Child Health Association
American Classical League
American Forestry Association
American Foundation for the Blind
American Historical Association
American Home Economics Association
American National Committee on International Intellectual Cooperation
American Philosophical Society
American Public Health Association
American Social Hygiene Association
American Society for the Study of Speech Disorders
American Tree Association and American Nature Association
Association of Land Grant Colleges
Atwater Kent Foundation
Barnes Foundation
Board of Christian Education of the Presbyterian Church in the U. S. A.
Camp Fire Girls
Carnegie Corporation
Child Study Association of America
Child Welfare League of America
Columbia Broadcasting System
Drama League of America
Federal Board for Vocational Education
Harmon Foundation
Institute of International Education
International Advertising Association Bureau of Research and Education
International Dental Health Foundation for Children
International Society for Crippled Children
Julius Rosenwald Fund
Mennonites of North America
National Music Teachers' Association
National Amateur Athletic Federation
National Association for the Advancement of Colored People
National Association for American Speech
National Association of State Libraries
National Association of State Universities
National Association of Teachers of Speech
National Board of Young Women's Christian Associations

ADMINISTRATION OF SCHOOL PLANT

The administration of a school plant is a profession demanding a practical knowledge of psychology, an understanding of human nature, a keen appreciation of educational values, a knowledge of educational needs, and a basic, functioning philosophy of life. The administration of a school plant is at the same time a business requiring executive ability, the power to organize efficiently, and the faculty to eliminate waste, lost motion, duplication of effort, loafing, and various evidences of perfunctory attitudes toward work. Hence, it follows that the administrator of a school—the principal—is both a professional man and a business executive. On the one hand, his duty is to supervise the educational activities in the building to which he is assigned; on the other, it is to demand that the work be done with a minimum of waste.

—Byron C. Kirby

National Broadcasting Company
National Catholic Welfare Conference
National Child Welfare Association
National Congress of Parents and Teachers
National Council of Geography Teachers
National Council of Parent Education
National Education Association
National Geographic Society
National Home Study Council
National League of Teachers' Associations
National League of Women Voters
National Organization for Public Health Nursing
National Radio Institute
National Safety Council
National Society for the Prevention of Blindness
National Student Federation
National Tuberculosis Association
Presser Foundation
Progressive Education Association
Radio-Victor Corporation of America
Shakespeare Association of America
The Shipherd Plan
Society of Progressive Oran Advocates
Union of American Hebrew Congregations
United States Coast Guard
United States Department of Agriculture
United States Naval Academy

In the organizations of less than national scope many units appear, chiefly colleges.

The following organizations given by states are interested in radio education and broadcasting:

Alabama
Athens College for Young Women
Judson College
Marion Institute
Radio Station WAPI
University of Alabama

Arizona
Gila College

Arkansas
Chamber of Commerce
Department of Education
University of Arkansas

California
Don Lee Station KHJ
General Electric Company Station KGO
Radio KPO
LaVerne College
Mills College, and Richfield Oil Company of California
Pacific-Western Broadcasting Federation
Pomona High School and Junior College
University of California
University of Redlands
University of Southern California
Whittier College

Colorado
Colorado School of Mines
Colorado State Teachers College
General Electric Company Station KOA
State Agricultural College
Trinidad Creamery Company Station KGIW
University of Colorado

Connecticut
Connecticut Congress of Parents and Teachers
Connecticut State Board of Education
The Travelers' Broadcasting Service Corporation Station WTIC

District of Columbia
George Washington University

Florida
Department of Public Instruction
Miami Broadcasting Company Station WQAM
Rollins College
St. Petersburg Chamber of Commerce Station WSUN
Sarasota County Chamber of Commerce
University of Florida
University of Miami

Georgia
Atlanta University
Berry Schools
Department of Education
Emory University
Georgia State College for Women
University of Georgia
WMAZ

Hawaii
McKinley High School
University of Hawaii, Extension Division

Idaho
Gooding College
State Board of Education

Illinois
Bradley Polytechnic Institute
Chicago Daily News Station WMAQ
Crane Junior College
English Journal
Ferry Hall
Great Lakes Broadcasting Company Stations WENR and WBCN
Illinois Women's College
KWRC
Milliken University
North Shore Church
University of Illinois
University of Illinois College of Law
Watchtower Radio Station WORD
Westinghouse Electric and Manufacturing Company Station KYW
WKBS
WLS
WMBD
Zion Broadcasting Station WCBD

Indiana
DePauw University
Evansville on the Air Station WCBF
Purdue University

Iowa
Berry Seed Company
Department of Public Instruction
Iowa Congress of Parents and Teachers

Luther College
Normal Baker Enterprises Station KTNT
The State University of Iowa
University of Dubuque
Upper Iowa University
Western Union College

Kansas
Hotel Lassen Station KFH
Kansas State Agricultural College

Kentucky
Conference of Southern Mountain Workers
Department of Education
University of Kentucky

Louisiana
Loyola University
Lusher School
Orleans Parish School Board
Saenger Theatres Station WSMB
Straight College

Maine
Department of Education
WLBZ

Maryland
Extension Service, State of Maryland
Johns Hopkins University
WBAL

Massachusetts
Bradford Academy
Lasell Seminary
Massachusetts Agricultural College
Massachusetts Institute of Technology
Shepard Stores Station WNAC
WEEL
Wellesley College
Worcester Polytechnic Institute

Michigan
Department of Public Instruction
Detroit News Station WWJ
University of Michigan
WAFD
WJR

Minnesota
Concordia College
University of Minnesota
WCCO, Gold Medal Flour Radio Station

Mississippi
Blue Mountain College
Chamber of Commerce Station WQBC
WTOT

Missouri
Christian College
Moberly Board of Education
University of Missouri
William Jewell College
Wilson Duncan Broadcasting Studios, Station KWKC

Montana
Symons Broadcasting Company, Station KGIR
University of Montana

Nebraska
Department of Public Instruction
Doane College
KGFV
KMMJ
Nebraska Wesleyan University
Norfolk Daily News Station
University of Nebraska
Woodmen of the World, Station WOW

Nevada
KOH
University of Nevada

New Jersey
College of St. Elizabeth
Rutgers University
WAAM
WODA
WOR

New Mexico
New Mexico College of Agricultural and Mechanic Arts

New York
Adelphi College
City of New York Municipal Broadcasting Station WNYC
College of the City of New York
Italian Educational Broadcasting Company
New York School of Social Work
New York University
Polytechnic Institute
Skidmore College
WHAM
Syracuse University
Union College
Wells College
WGBS
WHEC
WRNY and W2XAL Aviation Radio Station
WSYR

North Carolina
Department of Public Instruction
Duke University
North Carolina State College
University of North Carolina

Ohio
Antioch College
Cleveland Public Library
Community Chest and Council of Social Agencies, Cincinnati
Crosley Radio Corporation
Defiance College
Mt. Union College
Ohio State University
School of Education, Cleveland
University of Cincinnati
Warren County Farm Bureau

WLW
WKDN
WSPB

Oklahoma
KFJF
KGGF
Oklahoma College for Women
Phillips University
University of Oklahoma
University of Tulsa
WKY

Oregon
Agricultural Extension Service
Oregon Congress of Parents and Teachers
KGW
Pacific College
University of Oregon

Pennsylvania
Bucknell University
Department of Public Instruction
Department of State Police
Gimbel Brothers, WIP
WCAE
Grove City College
Lafayette College
Haverford College
Moravian College for Women
Pennsylvania State College
Pittsburgh Board of Education
WCAU
University of Pittsburgh
WLBW

South Carolina
Department of Education
State Radio Distributors

South Dakota
Dakota Western University
WNAX
University of South Dakota

Tennessee
Carson and Newman College
Southwestern College
WLAC

Texas
Agricultural and Mechanical College of Texas
Dallas Federation of Women's Clubs
WBAP
KFDM
Paul Quinn College
WTAT
Texas College of Mothers and Parent-Teacher Association
Valley Radio-Electric Corporation

Utah
Brigham Young University
Department of Public Instruction

Vermont
Middlebury College
State Board of Education
University of Vermont

Virginia
Emory and Henry College
University of Virginia
Virginia Polytechnic Institute
WRVA

Washington
American Broadcasting Company
College of Puget Sound

West Virginia
West Virginia University
Salem College

It is very interesting to note that so many organizations are interested in radio education. Since its inception, radio broadcasting has taken the country by storm. It is difficult to compress within the limits of the following few para-

graphs the outstanding accomplishments of this activity during the school year 1928-29.

Perhaps the most conspicuous event in this connection was the action taken at the meeting of the executive committee of the Department of Superintendence on May 3, 1929, when the following resolution was adopted:

Whereas, the Executive Committee of the Department of Superintendence of the National Education Association has been urged to sponsor a movement for education by radio; and

Whereas, this committee is convinced that there are great possibilities in aiding the work of such public and private schools as care to utilize properly directed educational programs; and

Whereas, the committee believes that this is a matter of great public concern,

Therefore, be it resolved that the Government of the United States be requested to study the situation, and that this committee does hereby urge the Secretary of the Interior to take the initiative in calling a small preliminary conference consisting of such officials of the United States Government as might be immediately concerned, the representatives of organizations representing public and private education of various grades, and those concerned with national chains of broadcasters.

In pursuance of this request, the Secretary of the Interior called a conference in Washington on May 24, 1929, to which conference the following were invited: The Office of Education; all members of the Federal Radio Commission; M. L. Aylesworth, president, National Broadcasting Company; Dr. Charles R. Mann, president, American Council on Education; Dr. J. W. Crabtree, secretary, National Education Association; Dr. Frank Cody, superintendent of schools, Detroit, and president, Department of Superintendence of the National Education Association; H. Robinson Shipherd, Business Training Corporation; Dr. J. L. Clifton, Director of Education of the State of Ohio; and Dr. Harold Stonier, educational director of the American Institute of Banking.

This meeting was attended by Hon. Ray Lyman Wilbur, Secretary of the Interior, who presided; Hon. William J. Cooper, Commissioner of Education, who served as secretary; Hon. Ira E. Robinson and Hon. Eugene O. Sykes, members, United States Radio Commission; John W. Elwood and Everett Case, representing National Broadcasting Company, New York City; William S. Paley, president, and Sam Pickard, representing Columbia Broadcasting System, New York City; Sherwood D. Shankland, secretary, Department of Superintendence; Dr. J. W. Crabtree, secretary, National Education Association; Dr. C. R. Mann of American Council on Education; H. Robinson Shipherd, Business Training Corporation; H. Grayson Martin, Philadelphia, representing the Western Electric Company, Frederic William Wile, Washington, D. C.; and Frank M. Russell.

Secretary Wilbur appointed a fact-finding commission which met on June 13, 1929. After a thorough discussion of the work before the commission, appointment of the following committees was announced:

A survey committee to determine what is being done in the way of educational broadcasting.

A committee on research to make objective studies of the results secured in the

(Concluded on Page 134)



A SEVENTH GRADE MATHEMATICS CLASS, WASHINGTON IRVING INTERMEDIATE SCHOOL, ROSLINDALE, BOSTON, MASSACHUSETTS. (See Page 43)

Instruction and Plant Operation as Constant Costs

Prof. A. C. Lambert, Provo, Utah

School-survey reports, city-school reports, and numerous reports of individual studies of school costs show a distinct tendency to examine the proportionate distribution of school expenditures when comparisons of proportionate or per-cent costs are made. The general practice is to classify, or group, school systems according to the population of the city, and occasionally according to geographic proximity. Is it not more significant, however, to study proportionate costs by classifying school systems according to the size of the total amount of money expended per pupil in average daily attendance? It may be that there is a certain necessary proportionate relationship, which maintains itself between the various major school expenditures in systems where money is being expended with about equal freedom or restraint. There may be such a thing as a desirable or necessary balance to preserve among these major costs. Data presented here strongly suggest such a possibility. Caution in setting norms from such data as are used here is the part of wisdom, naturally, and only continued analysis of cost data in given systems over a period of years will establish the ultimate truth or falsity of the hypothesis stated here.

Data reported in the studies of the Education Finance Inquiry Commission¹ in many recent school surveys,² and in many individual studies of school costs³ all point in the same general direction with reference to the cost of instruction, and they show that this item of cost, though variable, tends to take with remarkable consistency a given proportion of the total current expenditures. Data reported in this study throw further light upon the matter, and sug-

- ¹a) R. O. Stoops, *Elementary-School Costs in the State of New York*, Macmillan, 1924.
- b) George D. Strayer, and R. M. Haig, *Financing of Education in the State of New York*, Macmillan, 1924.
- c) J. R. McGaughey, *The Fiscal Administration of City School Systems*, Macmillan, 1924.
- ²a) John J. Tigert, et al., "The Utah School Survey," *United States Office of Education, Bulletin*, 1926, No. 18.
- b) L. V. Koos, *Secondary Education in California; Report of a Preliminary Survey*, California State Department of Education, 1929.
- c) Jesse B. Sears, *The Sacramento School Survey*, 2 Vols. The Board of Education, Sacramento, 1929.
- d) George D. Strayer, et al., *Report of the Survey of the Schools of Port Arthur, Texas*, Teachers College, 1927.
- e) George D. Strayer, et al., *Report of The Survey of The Schools of Duval County, Florida*, Teachers College, 1927.
- f) *Report of the Survey of the Schools of Beaumont, Texas*, Teachers College, 1927.
- ³a) B. J. Burris, "Variation in High School Cost of Instruction," *Bulletin of the School of Education*, Vol. 1, No. 4, University of Indiana, Bloomington, 1925.
- b) A. C. Lambert, unpublished studies at Brigham Young University, 1925, 1926, 1928, 1929.
- c) E. E. Lindsey, "School Finance in Iowa," *Journal of Educational Research*, 5:112-118.
- d) United States Office of Education, *Statistical Circulars*, Nos. 4, 7, 9, 12.

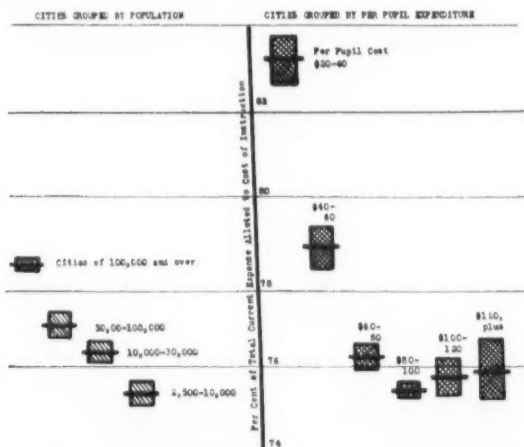


FIG. 1. THE PROPORTION OF TOTAL CURRENT EXPENSE ALLOTTED TO COST OF INSTRUCTION IN AMERICAN CITIES
Based upon 442 reports of all cities reported by the United States Bureau of Education in the two bienniums 1923-24 and 1925-26.
Horizontal bar indicates the mean per cent. One probable error of the mean extended above and below in the shaded area.)

TABLE I

RATIOS¹ BETWEEN THE DIFFERENCE OF MEANS AND THE PROBABLE ERROR OF THE DIFFERENCE OF THE MEANS OF PER CENTS OF TOTAL CURRENT EXPENSE ALLOTTED TO ITEMS OF SCHOOL EXPENDITURE IN CITIES² OF DIFFERENT SIZE, AND WHEN THE TOTAL ANNUAL COST PER PUPIL IS DIFFERENT.

Size of Groups of Cities for which Mean Per Cents Devoted to Given Function are Compared	Ratio for all cities in the Two Groups Compared, Size of City only Considered		Total Current Cost Per Pupil in Average Daily Attendance												
			Instruction						Operation						
			\$20-40	\$40-60	\$60-80	\$80-100	\$100-120	\$120 and over	\$20-40	\$40-60	\$60-80	\$80-100	\$100-120	\$120 and over	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
A-B ³	3.16	-4.73				5.23	4.93	1.62	-1.71			-4.14	-5.50	-4.96	.52
A-C	4.76	-7.36				5.47	4.97	3.81	2.09			-5.05	-6.90	-3.96	-2.39
A-D	7.59	-3.89				5.96	7.20	4.06	2.56			-4.38	-4.38	-.04	-2.53
B-C	1.56	-2.94				5.69	-.62	-.06	2.42	3.07		-4.14	-1.30	-3.42	-.52
B-D	4.22	.32				8.17	-.16	2.38	3.36	3.31		-2.09	-.31	-.62	1.25
C-D	2.57	2.70				4.06	2.24	.65	2.46	2.01	-.86	2.17	.01	1.95	1.39

1. When ratio is 3 or more the difference is regarded as significant.

2. Based upon 442 financial reports of all cities reported by the United States Bureau of Education in 1923-24 and 1924-25.

3. A: cities of 100,000 and over; B: cities of 30,000 to 100,000;

C: cities of 10,000 to 30,000; D: cities of 2,500 to 10,000.

TABLE I

gest that the same tendency toward constancy found for cost of instruction may also be true for the cost of plant operation.

An assumption which lies beneath all data involving comparisons of percentage cost is that the various headings under which expenditures are reported include comparable items. Non-uniform account classification naturally introduces error into all comparative studies of school costs. In data with as great magnitude as those reported here, this trouble is not eliminated either, but it may be that the principle of compensating errors will reduce the error materially. And just how refined in original classification data of this nature need to be to serve all practical purposes, is an open question. The fact remains that any study of per-cent distributions involves weaknesses. Per-cent distributions point out differences but often do not explain them. Any per cent in a given series is a resultant of variations in all the other per cents. This condition becomes also a strength of the method under some situations, for it is to determine just these relationships between several factors that such an analysis is used. And if a given function, despite the operation of all the other possible variable factors in the school programs, continues to take a consistently uniform proportion of the total cost, a basis is thereby laid for significant comparisons and an index to good or necessary practice is insofar established.

Main Expenditures Are Constant

Analysis of the tables of simple per-cent distribution of school expenditures in American cities, as these tables are published biennially by the United States Office of Education, shows that the proportions of total current expense devoted to such basic school costs as instruction and plant operation, within a group of cities of about the same population, are in general significantly constant. This constancy becomes still more apparent when cities are grouped according to the size of the total annual per-pupil cost. When the cities reported by the Office in the two bienniums 1923-25 and 1925-26⁴ are classified into groups according to the total per-pupil cost, the proportions of total cost devoted to instruction are significantly similar (as determined by the ratio of the difference of means to its probable error) among those systems expending from \$60 to \$100 per pupil. Significant

differences in the mean per cent allotted to the cost of instruction appear between groups of school systems when the total current cost per pupil falls below about \$60 and above about \$100. This significant similarity in mean per cents allotted to instruction is shown sharply in Figure 1, where the means are indicated as horizontal bars, with one probable error of the mean extended each way above and below in a shaded area.

Some specific facts for these groups of city school systems are shown in Table I. Column 2 shows that, when the school systems are grouped according to size of population, there are significant differences in the proportion of total cost devoted to instruction between the group of large cities with 100,000 population and over and every other group of cities. The two intermediate groups do not differ from each other significantly. But columns 4 to 9 show that the proportions devoted to instruction in the large cities differ significantly from the next smaller group only when the per-pupil cost falls in the two brackets of \$60-80 and \$80-100. The two intermediate groups show, on the basis of population alone, no differences in the proportions allotted to instruction, but line 4 of Table II shows under columns 4 to 9 that, when the per-pupil cost falls at \$40-60, or at \$120 and over, real differences appear. In other words, these two groups of cities of 10,000-30,000 and 30,000-100,000 allot really different proportions of their dollar to instruction only when the total per-pupil cost falls outside the general limits of \$60 to \$100.

There are no significant differences in the mean per cent of total money devoted to instruction in the two smallest groups of cities, unless the per-pupil cost falls in or below the bracket of \$20-40. If the size of the city is disregarded entirely and per-pupil cost determines the classification, the proportion devoted to cost of instruction in the group of systems spending \$20-40 is significantly different from every other group. The same is true of the group spending \$40-60. These two groups also differ from each other. But, as soon as the total per-pupil cost reaches \$60-80, the proportion of total cost devoted to instruction remains constant, even when the annual per-pupil cost runs to \$120 and over.

It seems clear that classifying school systems according to the size of the total per-pupil ex-

⁴Statistical treatment of the data for the two bienniums shows no significant differences for the two arrays of data, and they are combined here to increase the number of cases.

(Continued on Page 124)

An Experiment in Pupil Segregation

William T. Miller, Master, Washington Irving Intermediate School, Boston, Massachusetts

There has always been a wide difference of opinion on the part of educators on the desirability of segregating the sexes in different types of schools. It is not the purpose of this study to go into the arguments for and against segregation, which have been brought out by authorities on school administration and organization. In a general way, the advocates of the mixed school insist on the social objectives of education as a potent reason for keeping the sexes together, so that the school may be truly social. They also maintain that both discipline and study benefit from the presence of both sexes in the same school. Each sex gains something from the other. The opponents of the mixed school make contradictory claims. They believe that discipline is easier and better in a segregated school, and that study is subject to less distraction when the sexes are separated. Instead of gaining, they think that each loses something in naturalness in the presence of the other.

In many ways the discussion of this problem of segregation is impractical as a purely academic matter. In the first place, the type of school makes considerable difference. What may be true in the primary grades may not be so in the junior or senior high school. Also community peculiarities may help to decide the question. In very small places it is obviously inexpedient to attempt to supply separate schools for boys and girls. Sometimes the kind of school makes segregation practically imperative. In a large city where there is a demand for a trade school, it is only practical economy to place together the large number of boys desiring such instruction, and establish a boys' trade school. In the same way, large girls' trade schools have been built in most of our metropolitan cities.

There is still a broad field, however, where this question of segregation demands some thought. In the organization of the general high school and the junior high school, there is need for attention to the problem. In some large cities there has been a tendency to try both types of schools, and Boston is a good example of this type of organization. At the present time the Boston school system includes a teachers' college, 18 Latin and high schools, 1 continua-



AN EIGHTH GRADE GEOGRAPHY CLASS, WASHINGTON IRVING INTERMEDIATE SCHOOL, ROSLINDALE, BOSTON, MASSACHUSETTS

tion school, 1 clerical school, 2 trade schools, 22 junior high schools, and 60 elementary schools. The organization of these schools is shown in the following table:

	Boys	Girls	Mixed	Total
Latin and High Schools.....	6	5	7	18
Intermediate Schools	1	3	18	22
Elementary Schools	10	8	42	60
Trade Schools	1	1	0	2
Continuation School .....	..	..	1	1
Teachers' College .....	..	1	..	1
Clerical School .....	..	1	..	1

A study of this table in the light of historical research is interesting. Two of the great boys' schools, the public Latin and the English high schools, are very old; the former is the oldest public high school in America. They were boys'

schools from the start and have remained so. In like manner, several of the elementary schools are very old, and had their beginnings in the days when education was largely a male prerogative. In other cases the schools are the embodiment of some new movement in education which crystallized into a school. Such are the Mechanic Arts and the Practical Arts high schools, the former for boys and the latter for girls. The High School of Commerce, for boys, is a later example of a similar development. But even during the past five years, four segregated high schools have been established in two rapidly growing sections of the city: the Dorchester High School for boys and for girls, and the Roxbury Memorial High School for boys and girls.

All of these facts have been mentioned simply to bring out the fact that there is still a difference of opinion on this question of segregation. It would perhaps be going too far to say that there is a growing demand for segregation of the sexes in the upper grades, but there is at least some indication of such a feeling on the part of parents. It was in consequence of such an impression on my part that I began in my own school the experiment detailed below. The school was organized as a mixed intermediate or junior high school, containing grades 7 to 9. Its mixed character was fixed by regulation, but its internal organization was optional with the master.

The first fact that struck me was the fact that we had a large number of boys electing identical courses, and the same was true for girls. In a small way we started to organize home-room groups in segregated numbers, all boys or all girls. This proved so successful that it has been continued until at the present time our school shows the following condition:

Classes by Sex				
	Boys	Girls	Mixed	Total
Grade 9	4	4	2	10
Grade 8	4	4	3	11
Grade 7	5	4	3	12

We have derived several advantages from this type of organization. Approximately 75 per cent of the teachers say that they prefer to teach the segregated divisions. Boys' groups are



A NINTH GRADE CLASS IN WOODWORKING, WASHINGTON IRVING INTERMEDIATE SCHOOL, ROSLINDALE, BOSTON, MASSACHUSETTS



A NINTH GRADE CLASS IN SEWING, WASHINGTON IRVING INTERMEDIATE SCHOOL, ROSLINDALE, BOSTON, MASSACHUSETTS

supposed to be more difficult to control than mixed groups, but it does not seem to be so here. In such work as military drill or gymnasium work, it is simpler to program a segregated group than to divide a mixed class. But more important than all these considerations is the fact that in segregated classes there is an absence of the distracting influence of one sex on another. We believe that in children of this age,

this is an important matter, and that the segregated class is the solution of the difficulty.

The objection most commonly heard to the segregated class is that it destroys the social atmosphere. The answer to this in a school such as ours is, that the social atmosphere exists in the extracurricular activities of the school, leaving the classroom life to be devoted solely to study. In other words, the school as a whole is mixed and therefore social, while the classes are largely segregated, for better working conditions.

As a last side light on this method of class organization, we might consider the children's own reaction to the plan. A questionnaire issued to pupils on the matter elicited answers from 1,041 children, who expressed the following opinions:

Boys preferring boys' classes.....	472
Boys preferring mixed classes.....	27
Girls preferring girls' classes.....	491
Girls preferring mixed classes.....	51

Such a tabulation may not have much significance or weight, but it at least shows a preference. No tabulation of parental preference has been made, but practically every parent interviewed on the question has been enthusiastic in support of our experiment in segregation.



EUGENE F. HENDRICKS
President, Board of Education, Reading, Pennsylvania

In years of service, Mr. Hendricks is the oldest member of the board. He was elected for a term of six years in 1919. The following years, he was elected vice president. In 1925, he was chosen for another term of six years, and in 1927, was elected to the presidency, and reelected to that office each year thereafter. During Mr. Hendricks' administration, one high school, two junior high schools, a continuation school, and eight grade schools were built at a cost of \$7,500,000.

The Organization of the Superintendent's Office

A Study Headed by Clyde C. Green

"While we assume that the whole duty of a superintendent of schools is to direct public education in his community, utter frankness compels the admission that in many instances much of the superintendent's time and nervous energy is dissipated by activities only remotely concerned with the educative process. Community traditions, the character of the community, the personal characteristics of the superintendent himself, and the administrative organization set up by the school board, are factors which determine whether a superintendent of schools shall be primarily a director of learning, a business executive, a glorified politician, or a happy combination of all three."

So reads the introductory paragraph to a committee report presented by Clyde C. Green, superintendent of the New Castle, Pa., schools, on the organization of the personnel of the superintendent's office for the improvement of instruction. The committee did not resort to the questionnaire method in reaching conclusions, but relied upon the information secured from certain typical communities. The report continues as follows:

Superintendent as Administrator

"In cities of more than 30,000 population in Pennsylvania and the country at large, there appears to be a well-defined tendency to organize the administrative affairs of the district in such a manner that the superintendent is relieved of personal responsibility for minor business details. Recent studies indicate a definite tendency to abolish standing committees of the board, to hold the superintendent personally responsible for purely instructional matters, to create such offices as business manager, superintendent of buildings and grounds and equipment, superintendent of supplies, and to make these officers responsible to the school board through the office of the superintendent of schools."

Superintendent Green also finds that in about 80 per cent of the Pennsylvania cities there is conflict between superintendent and principal. In most cities the superintendent acts as referee when such conflicts arise. An examination of the dominant activities reveals six types of serious-minded superintendents, as follows: the super-teacher type, the consulting engineer, the research specialist, the organization expert, the combination of consulting engineer and organ-

ization expert. Some of these types are analyzed by Superintendent Green as follows:

"The 'superteacher' type is found in districts of 5,000 to 50,000 population. He visits personally every teacher in his school each month or more frequently—in some cases he makes 300 visits each month. He proceeds on the assumption that he is the most highly skilled teacher in any grade or any subject in his school system, that he is the most skillful supervisor in the system, that he can diagnose a school-room situation in from three to five minutes, prescribe a remedy and pass on to the next case. For the most part his supervisors, if he has any, merely see that his orders are obeyed. Usually his course of study and methods of instruction are highly standardized and defined in great detail. His is usually a 'one-man organization' which will come to grief when he is unable to function as a commander-in-chief.

"The 'consulting engineer' type is usually a man of extensive training and experience. Because of training, experience, and temperament, he is disposed to make a careful and deliberate study of every situation before he offers his

opinion. In the meantime, he is always prepared to utilize every resource at his command, especially the personnel of his organization to determine data from which conclusions may be safely drawn.

"The 'research specialist' at his best is a diagnostician. He approaches his task with a scientific attitude of mind, and he evaluates instruction in terms of quantitative or qualitative standards. If he is a capable executive, remedial measures will follow his diagnosis of a situation and he will proceed with the improvement of instruction on a sound basis. If he is a weak executive his research activities may seriously interfere with the teaching process.

"The organization expert has ability to marshal his forces, even though they are inadequate, so that effective results may be obtained in terms of whatever standards appear to be desirable at a given time. If valid standards are not adopted, his organization may present the appearance of satisfactory school situation but be woefully deficient in results. His instructional corps is so organized that it will function for a reasonable period without his active participation. It is not a 'one-man organization.'"

An Ideal Plan of Organization

In his conclusions on what constitutes an ideal organization, Superintendent Green submits the following: "The ideal personnel organization has as its head a superintendent of schools who qualifies as a director of learning. Through experience and training he must know the elementary, the secondary, and the special fields of education. He cannot direct the learning process or improve instruction if he is not a successful teacher himself. He must be a master of details but not a victim of details; and he is not a wise executive if he builds the organization around himself in such a manner that his sudden withdrawal would wreck his system.

"Buildings, equipment, supplies, and finances have a direct relationship to the process of instruction. While no considerable portion of the superintendent's time and vitality should be consumed with details relating to these agencies, their administration should be in charge of officers who are responsible to the board through the superintendent's office. A reasonable amount of professional control in these matters by the superintendent is essential. The so-called dual control of school systems has not proved satisfactory.

SCHOOL SPIRIT

I am the ideal in the process of fulfillment; I am the dream in the making. I am energy directed into constructive channels. I am the inspiration to achievement and the pride in accomplishment.

I encourage good scholarship. I enlist the interest of students and teachers in common enterprises. I prompt kindness, willing service, and perseverance in the task.

I am faith in fellowship; I make for understanding between schoolmates. I shift the emphasis from self to school. I am a force in character building.

I am the magnet which draws toward the school the good will and kindly sentiment of alumni everywhere. I am the guardian of tradition.

I am that which makes athletes play a better game than they know how. I am the courage which enables contestants to lose gamely, the generosity which teaches a team to win without arrogance, the perseverance which enables it to come through against odds.

I am the voice of youth, and the clarion of youth's own code to the world. I am—School Spirit.—Hazel E. Murphy.

When Board Members Become School Executives

Ernest E. Oertel

It seems there are certain jobs in nearly all school systems that many persons just love to do merely for the glory of doing them. I have in mind some more or less routine tasks that normally and rightfully are performed by a superintendent of schools. The persons who like to do them are board-of-education members scattered here and there who forget, ignore, or misunderstand the prerogatives of the superintendent's position, and who misinterpret the province of their own office. Most of these persons live in rural sections, and in nearly all cases they are burdened with time — time that nobody seems to want to make use of. Occasionally one such is elected to be a school-board member. It is perhaps his first experience in a position of real responsibility and trust, and to deserve the office, it often happens that he at once assumes that he must keep very busy helping to "run" the schools.

This type of director is, for obvious reasons, rare in business fields, but for the schools — well, he has the time. And for such an insufficient reason the public frequently elects persons totally inexperienced in handling men, money, business, or anything of consequence, to control the most important and costly public business of the community. Once elected to a trusteeship, such a person often becomes insufferably officious. To express himself, to justify his being in office, and to satisfy his sheer love for doing important things, he makes the most of the opportunity that the unsuspecting public offers through its system for the control of public education, and becomes, alas, a school executive.

Gentlemen of Leisure

My experience has been, and I suspect it is more or less typical of that of most school officers, that where there are trustee-executives there is a concomitant slowing up of all the mechanics of school administration, not to say anything of the bungling, mismanagement, and inefficiency that usually result from such an arrangement. It seems to have fallen to my lot in several different positions to have inherited board members who were gentlemen of leisure, imbued with this idea that since they had been elected trustee they were obliged to spend one half of every conscious hour directing the affairs of the schools. I have known some trustees who were keenly disappointed if a board meeting were adjourned before midnight, and I have attended dozens of trustees' meetings that ended after 1 a.m., fully three fourths of the time having been used either in telling yarns or in delving into detail business that could have been executed much more expeditiously and effectually by insubordinates.

This may sound incredible to the thousands of good trustees who are busy and practical men with influence and power in other than educational fields — men who have time to outline policies at swift-moving, businesslike, not-too-frequent board meetings, but positively not a minute to spare to do the superintendent's work. City superintendents with good boards to work with and who have not had experience in some of the thousands of little provincial towns of this country, may think that I exaggerate in relating incidents that I shall cite to illustrate the evils that develop when trustees become executives. I feel sure, however, that many town and district superintendents or high-school principals, where the latter are directly responsible to a town board, will be willing to vouch for my veracity.

The public intrusts its medicine, law, engineering, and other sciences and arts to the

hands of expert practitioners, but often makes the inadvertent, nevertheless serious, mistake of consigning the highly technical and professional business of education to laymen who sometimes have only one credential — time.

Mr. and Mrs. Public frequently fail to recognize mismanagement and blundering on the part of trustee-executives when these attempt to conduct the community's most important business. If a trained and efficient school executive decries such mismanagement and blundering, he is misunderstood, and is charged with being thirsty for power. Hence, a single person cannot easily effect any drastic changes in short periods of time. The public is not yet sufficiently critical of the methods employed in carrying on its business of public education.

Legislative or Executive — Which?

I do not mean to speak disparagingly of the public, of school trustees, or of small towns, I wish merely to bolster the belief, by citing my personal experience, that the fundamental principle in educational administration which classifies board work as legislative and the superintendent's work as executive is sound and practical. All reasonable schoolmen recognize the fact that trustees must have ultimate control of school moneys, that they must direct the major policies of the school districts they represent. It is generally accepted that a school board is and must be vested with sovereign power to determine educational policies, with the right to select experts to administer the schools, and with the authority to pass on all major undertakings and to regulate expenditures. But all of the best-thinking laymen, as well as professional workers in the field of educational administration, support the theory that boards of education should function in legislative and not executive capacities.

It is believed by the majority of people informed in school administration that even in the matter of working out major policies and controlling expenditures, the paid executive in the school system — the superintendent — should act in conjunction with his board members. Progressive and capable board members act largely upon the recommendation of experts even in these matters over which it is always conceded they are the sole arbiters. They believe their superintendent should know what is right in a majority of cases. They have opinions of their own, to be sure, and if they think their superintendent wrong, they tell him that they disagree with him, and that, unless they can be won over to his point of view they will have to ask him to yield on this or that particular matter. In matters of major importance, several minds sometimes arrive at a safer method of procedure, a method that is more likely to be in accord with the wishes of the schools' constituents.

Mania to Boss Job

If a superintendent has board members, however, who, in addition to passing on all general policies and controlling expenditures, insist on buying supplies, employing teachers, directing building and maintenance activities, and serving as standing committeemen in a thousand-and-one executive capacities, then that superintendent is almost certain to be engulfed in a slough of despair, and, although the board members may enjoy being executives for a short time, their path will not be strewn with roses, as many who have had the experience can testify. Where trustees cannot desist from interfering with the technical and professional func-

tions of the school departments, there is, sooner or later, a certain development of both external and internal trouble.

I once worked with a board in which trustees had been nearly 100-per-cent school executives and where, despite the new superintendent's peculiar ideas, they were determined to keep the happy little business intact. The clerk kept all of the district's papers, bills, and correspondence in two apple boxes, without indexes, compartments, or covers. The district was not poverty-stricken; files were just considered an extravagance. The clerk wrote out all warrants and delivered them personally to the teachers and the merchants. He did all of the buying for the district. The president of the board was the committee on school visitation. This probably was considered an extremely important post, for, alas, he came to see us practically every day!

It may be hard to believe, but this gentleman, a retired farmer, in his effort to perform the important duties intrusted to him as a school trustee and to be just to all the little children in the schools, went so far as to count the number of erasers and the pieces of chalk in each room to see that they were distributed equitably. I have heard of recalcitrant boys being asked to "work off" hours charged against them by counting door knobs and electric outlets scattered throughout the school plant, but not until I became a school superintendent did I believe it possible for anyone to be willing to count such drab things as chalk and erasers without hope of any kind of remuneration for such a prosaic task. Except for a forced discount in the gentleman's prestige, he might have continued indefinitely this more or less innocent business without doing anyone any particular harm.

But this officiousness led him one day to correct a teacher before her class on the spelling of a word. In the matter of spelling he was right and the teacher was right. It was one of these words that offer first the second choices, and the trustee held that the second and perhaps more popular choice was the only choice that could be made. The teacher did not argue; she was too mortified. She came to me with a faltering voice, and with tears in her eyes said that she could not stand having Mr. — come into her room any more. She declared that he made her nervous by his supercilious attitude and that this last indignity was simply too much.

Young and impetuous as I was, I boldly ordered Mr. — from the building and told him never to come back again, except for board meetings, as long as I was superintendent. Startled by the novelty of the situation he left, but only to start an invective campaign against me that reverberated throughout the town and countryside.

Reasons for Quitting Job

What happened during the remainder of that year would really make good reading if one could cover it as a modern fiction writer would. I left at the end of one year for three very good reasons: (1) I didn't like the job, (2) I wanted to go elsewhere, and (3) the trustees wouldn't have me again anyway. It was, at the time, the kind of job that gives one a great professional boost if he loses it, and kills him deadlier than a mummy if he keeps it.

The important result of this conflict in ideas on school administration was not the fact that I left, but that, as I learned later, Mr. — dropped off the school board shortly after I was out of the way, and that the executive functions

of the board were very materially reduced by voluntary action of the board itself.

I cannot desist from observing with a smile that even when acting in their own domain and within their vested rights, I have known some trustees who did not display any extraordinary amount of business acumen.

I was once hired as principal of a fair-size union high school in a prosperous district. The clerk of this board confided to me shortly after I was elected that he supported my candidacy from the first minute he saw me because my hair was auburn and because I reminded him of a school teacher of his whom he respected profoundly. He said, moreover, that the board wanted me because in presenting my sales talk to them I talked only five minutes whereas they had been listening for several evenings to 30-, 45-, and 60-minute applications. Good reasons, both of these. I had struck them just right, psychologically. I was merely lucky. Perhaps they were tired and wanted to get it over with. At any rate, the job was mine fifteen minutes after I had first seen them, and papers and friends were totally unnecessary.

This board, capable of electing a principal in a quarter of an hour, was made up, as I soon discovered to my surprise, not of legislators who were able to conduct important business with dispatch, but rather of petulant clerks who were exceedingly careful about details and took precautions of every kind. They were so careful, in fact, that the clerk of the board kept all of the important papers in a safety deposit vault at the bank in his own name. He was almost offended once when I asked the board, shortly after becoming principal, for a check-up on insurance. He assured me almost uncivilly that the board always took care of such things—that I need not worry or bother. Not quite one year later the district had an \$80,000 fire, and it was discovered that they had \$24,000 insurance in force. Two policies had lapsed and the board had not known it!

One of the members of this board was interested in securing the appointment of a friend on the faculty. He won his point with the other board members, the man was elected, and the new principal was informed of the action of the board. Warm support for the faculty member on the part of his board patron turned in the brief space of eighteen months to marked disdain, and the man was dismissed unjustly amid a furor of condemnation against the entire board.

Insisted Upon Purchasing Supplies

I have worked under two trustees who insisted on acting as purchasing agents for the district, for the convenient reason that they owned mercantile businesses. Contrary to state laws in both cases, they supplied goods to the schools from their own stores and billed them in their own names, and, strange to say, for a long time they had been getting their warrants through without trouble. Backing down when under fire for the practice, they declared that they were merely solicitous for the district, that they wanted to save the district money and that they were selling to the district at 10 per cent below their regular retail prices. They liked to do the work. They wanted to make sure that the school would not be "taken in" by unscrupulous outside firms. It was a pleasure to serve the public as they had been serving it, and they thought the public miserably stupid not to appreciate their efforts.

One trustee whom I shall never forget was an expert in all things under the sun, and being a school committeeman, he was ever ready to give the school and the faculty the full benefit of his wide experience and his omniscience. He once had a suspended basketball backstop built to suit his fancy after the need for one had been made known to the board. It was not until he had built it over twice and had spent \$140 of



HENRY J. GERLING,
St. Louis, Missouri

Mr. Henry J. Gerling, who was recently elected superintendent of schools at St. Louis, Mo., was born in 1870 in Normandy, Mo. He attended the schools in Normandy, St. Louis, and Columbia, Mo., the preparatory department of the University of Missouri, and later the University.

Following his graduation, Mr. Gerling taught at Columbia for a year, and then returned to the University where he took work for master's degree. He became principal of the Columbia High School in 1894, when 23 years of age. In 1896, he entered Cornell University, where he held the White Fellowship in Political and Social Sciences.

In 1899 Mr. Gerling went to St. Louis as principal of one of the schools. During the period from 1899 to 1908 he served as principal of the Laclede, Fremont, Hodgen, and Wyman schools. He was appointed teacher of history in the Harris Teachers College in 1909. In 1910 he returned to the principalship of the Wyman school, which had become the observation school of the teachers' college.

In 1915 Mr. Gerling was elected as assistant superintendent under Ben Blewett. He held the office until July, 1929, when he was made acting superintendent of schools, which position he continued to hold until January, 1930, when he was elected superintendent of schools for a term of four years.

By training, experience, and ability Mr. Gerling is especially fitted to take up the duties of superintendent. He has grown up with the school system and has been a vigorous supporter of all movements for the building up of the school system and for advancing the cause of education in St. Louis.

the district's money in vain for carpenters' wages and material in an effort to create something that would suit the boys and meet official standards, that he finally concluded that perhaps it would be a good idea to go to the physical-education director and find out just what he wanted and what was official equipment for league games.

This same gentleman volunteered his services to the dramatic department in staging an all-school play. He worked indefatigably as a stage hand for whole days at a time, and he spent more of the district's money for properties than the dramatic instructor would have dared hope for in presenting half a dozen plays. He became so efficient that the sloat boxes refused to work and most of the light circuits became mixed while others shorted. The director had words with him, and for a time it seemed we were not going to have a play at all. The director prevailed, fortunately, and again a trustee executive wondered at the ingratitude of an unappreciative world.

Business and Professional Judgment

Often I have been surprised at how reluctant some school trustees who like to be executives are to believe that a schoolman can have some

small degree of business judgment. There are actually many trustees who have a feeling that school superintendents and principals are merely a sort of *super-teachers*, passably apt at working with ladies and children, but not competent to manage or direct the business affairs of the district. I know one trustee who religiously affirms that the board of trustees should authorize and in most cases execute all of the business of the district through the several committees of the board.

In at least three specific cases within a single school year it was demonstrated to this man that his peccant business judgment had been costing the district heavy royalties. His philosophy did not change, however. This gentleman confided to me that his own personal business was rapidly going to pieces, but he continued to insist on managing every little detail of the school's business. His constituents, moreover, liked him, because he talked eternally about economy. He spent at least one hour each day of his term as trustee on school business.

Sometimes he would admit that he had worked a whole half-day or several whole evenings putting bills in line for payment, writing out warrants, taking care of school correspondence. At the same time he was being taxed so heavily in time, I had two capable girls reporting to my office daily for laboratory work in office practice, and, try as I might, I could not find enough purposeful clerical work to keep them busy. I suggested many times that I should like to relieve the clerk of the board of some of this detail work, but he would not release a single page of his portfolio.

Love to Sign Dotted Line

Progressive metropolitan school trustees, men with large responsibilities and to whom time means money, are asking if there is not some way that their names can be stamped so as to save them the trouble of signing warrants, papers, diplomas, contracts, etc. Many rural trustees that I have known, however, just love to sign on the dotted line. I have seen not a few do it with much obvious gusto and with warm ecstatic flourish. Signing a fifteen-thousand dollar check! What a droll whistle and whew usually follow; not to speak of the trite comment, "I wish I had all the money I have signed away in warrants," or the hackneyed, "I wish I had a dollar for every warrant I've signed."

Committee control of detail school business by board members, the bane of successful and progressive school administration, is an evil that persists where it is least needed—in the small towns and rural sections. Time was when boards were so large in the cities of our country that they had to be divided into committees to expedite consideration of problems too complex for the whole group to handle. That was before the day of the professional superintendent. Now boards are smaller and committees are less popular. Where they do exist—where a board of five has a specialist on finance, one on heating and mechanics, one on music and dramatics, another on athletics and bookkeeping, and a fifth on purchasing, all of whom insist on functions 100 per cent executive on standing committees—this arrangement makes life most miserable for a superintendent who happens to have any ideas of his own and who is in the least concerned about accomplishing something educationally for the district employing him.

Such a board were better off without a superintendent: they would at least get all the grief for their egregious achievements. I know of one school where the trustees require teachers to come before them personally to ask for anything they may want. The august body of trustees deliberate long and painstakingly, and if they decide that what the teacher wants is worth

(Concluded on Page 141)

Rating Teachers and Principals to Improve Their Service

Pittsburgh Puts a New Slant on the Difficult but Valuable Plan of Rating Instructors*

S. E. Weber, Associate Superintendent of Schools in Charge of Personnel, Pittsburgh, Pennsylvania

The most common objective aimed at in rating teachers seems to be the classification of teachers for the purpose of promotion in salary, transfer in position, demotion, or dismissal. In the present discussion I shall address myself to the attainment of another objective, which up to this time has been included in most of the rating schemes advocated; such as those of Boyce, Elliott, Gray, Strayer and Engelhardt, and others, but has not received conspicuous emphasis. The objective referred to contemplates the use of "programs" for the improvement of teaching procedure carried on by teachers and the improvement of administrative and supervisory procedure on the part of principals of schools. Under the plan to be outlined presently, the first objective is to be regarded as a result rather than an objective.

It is assumed that those in charge of school systems should aim constantly to improve the processes of instruction through the development of more efficient teaching. The administration and supervision of schools should have this as their primary objective. All plans of rating teachers should be built upon this assumption.

With this objective in view the associate superintendent in charge of personnel in Pittsburgh has, upon Doctor Davidson's suggestion, changed the name of our merit plan of classifying teachers and principals from rating cards to (1) "Program for Improving Teaching Procedure" and (2) "Program for Improving Administrative and Supervisory Procedure." Both of these programs have been formulated by the personnel department in cooperation with the superintendent of schools, his executive staff, the principals of grade, junior and senior high schools, and, through the latter, with teachers in the different types of schools. These programs are tentative to this extent that they will be revised as further constructive criticisms from teachers, principals, and members of the executive staff arise from their use. The plan inaugurated in Pittsburgh is one of professional cooperation, embracing in its scope every member of the teaching force.

A Check of Positive Qualities

Each of these programs contains a considerable number of definite items on which each teacher or principal can survey his own professional qualities of strength or weakness. The items enumerated are all of a positive character which may be checked under the captions of superior, excellent, good, fair, or unsatisfactory. These captions are provided for and arranged in the order of progression because it is believed that the classification of a teacher or principal under one of these captions will offer the greatest incentive to improvement in service.

A copy of the "Program for Improving Teaching Procedure" is furnished to each teacher and each principal. Teachers are not required to file the records they make of themselves in either the office of the principal or in the office of the personnel department. The larger use of these programs is intended for individual surveys, for confidential conferences between teachers and principals where proper personal and professional relationships have been established, and for group discussions on professional improvement.

In a similar manner, a copy of the "Program for Improving Administrative and Supervisory Procedure" is furnished to each principal. Principals are required to file the records they make



MR. S. E. WEBER

of themselves in the office of the personnel department, but they are welcomed to confer at any time with any member of the personnel department on any professional matter directly concerning themselves or concerning any teacher under their supervision. Items of a personal nature, such as neatness in personal appearance and quality of character are not checked, but are emphasized at the beginning of both programs by a statement stressing the importance of these qualities in teachers and principals.

Principals of all schools will be required to file in the office of the personnel department before the fifteenth of May each year one of the "Programs for Improving Teaching Procedure" for each teacher, on which the several items are checked off and a final judgment of each teacher is given by the principal. The programs so filed will be regarded by the personnel department as confidential information. They will not become the official record of teachers' classifications, but will be used by the personnel department as one of the sources from which the official record is finally made up.

How Principals are Rated

In a similar manner, associate superintendents of schools will file in the office of the personnel department, before the fifteenth of May each year, one of the "Programs for Improving Administrative and Supervisory Procedure" for each principal. These, likewise, will be regarded as confidential information by the personnel department. The official record will also be based on other sources of information, such as that derived from the bureau of research, directors of special subjects, supervisors, and complete personnel records setting forth degrees held, extension courses pursued, extracurricular activities engaged in, membership and participation in professional organizations, contribution to curriculum revision, travel, publications of magazine articles and books, and contributions to the best interests of any branch of the school system.

The information obtained from the foregoing sources concerning any teacher or principal is supplemented by actual classroom observation by some member of the personnel department. In some instances several observations are made of the same teacher's work and previous judgments arrived at are rechecked and sometimes revised. The records finally made up by the personnel department become the official rec-

ords of the board of education. The official records so compiled provide a great degree of uniformity in classifying teachers. They simplify procedure and center responsibility.

Main Divisions of Teachers' Card

The main division in the "Program for Improving Teaching Procedure" are: I. Personal equipment of the teacher; II. Academic, professional, and technical equipment; III. Condition of classroom; IV. Direct factors in the teaching process; V. Response of class; VI. Results.

Under "Personal Equipment" are included such items as health and vigor, bearing or carriage, atmosphere, voice, use of English, initiative, industry, punctuality, promptness, and attitudes toward work, principal, supervisors, other teachers in building, and pupils.

"Academic, Professional, and Technical Equipment" has reference to the teacher's ability to convey ideas by the use of simple, clear, and correct English, general scholarship, thoroughness of scholarship and training in particular specialty as demonstrated in subject taught, professional training and growth.

It seems needless to point out that there is a higher degree of correlation between comprehensive and thorough scholarship and efficiency in teaching procedure than there is between low scholarship and efficiency in teaching procedure. A similar parallel may be drawn between professional training and efficiency in teaching procedure.

A number of valid supplementary deductions may be made from the foregoing conclusions. Any system of classification of teachers should consider the teacher's capital of academic and professional training acquired before entering the teaching service. Teachers with special interest in and special aptitude for any branch of the service should be encouraged by professional recognition and by salary paid to remain in that branch of the service. (This is the strongest argument for a single salary schedule). Advanced courses pursued in college or university during the term of service should be selected with but one end in view, namely, the strengthening of teacher's academic and professional resources to render a higher quality of service. To make possible the highest quality of service and to protect the teacher's health, the number of credits sought during each semester should, as a rule, be limited to four; during a six weeks' summer session, to six.

Classrooms and Teaching Methods

The caption, "Condition of Classroom," emphasizes desirable physical features, such as good housekeeping in having everything in its right place, adequacy and availability of all teaching material, posture of pupils and advantageous seating of pupils, attention to light, temperature and ventilation, teacher's and pupils' schedules of the day's work in evidence.

"Direct Factors in the Teaching Process" concern themselves with the constant observance of the laws of learning governing the mental procedure of the pupil, the technique of instruction, and the legitimate use of teaching devices.

The importance attached by Dr. Morrison¹ to the teacher's observance of group technique finds justification in the results that may be expected. There is evident need of pupils and teachers having a clear-cut objective in view at the beginning of any school activity, throughout

*Abstract of an address before the Department of Superintendence, Atlantic City, February 25, 1930.

¹Morrison, *The Practice of Teaching in the Secondary School*, Chap. 6.

I. PERSONAL EQUIPMENT (Check in one column opposite each item)		II. ACADEMIC, PROFESSIONAL AND TECHNICAL EQUIPMENT (Check in one column opposite each item)		III. CONDITION OF CLASSROOM (Check in one column opposite each item)		IV. DIRECT FACTORS IN THE TEACHING PROCESS (Check in one column opposite each item)		V. DIRECT FACTORS IN THE TEACHING PROCESS (Check in one column opposite each item)		VI. RESULTS (Check in one column opposite each item)	
Superior	Good	Superior	Good	Superior	Good	Superior	Good	Superior	Good	Superior	Good
<p>Notes: It is assumed that the teacher possesses an appropriate character, a good personality, and a good command of the English language, and that he is a native-born American citizen.</p>											
<p>I. PERSONAL EQUIPMENT</p> <p>1. Health and vigor. Ability to stand up under the work assigned.</p> <p>2. Energy or energy. Focused, self-controlled.</p> <p>3. Prowess for and enjoyment of leisure.</p> <p>4. Atmosphere. Enthusiasm; cheerful disposition.</p> <p>5. Voice. Pleasant to hear; distinct enunciation of syllables and words; strong power.</p> <p>6. Use of English.</p> <p>7. Initiative in the effective use of teaching devices and teaching technique and responsiveness in discipline or variations of lesson presentation in unprepared teaching situations.</p> <p>8. Industry. Steady application to the work.</p> <p>9. Punctuality. Examples. To be on hand when one's assigned duties are required to begin, to have reports on time.</p> <p>10. Promptness and thoroughness in the work required of teacher and the work which teacher requires of pupils.</p> <p>11. Attitude toward:</p> <p>a. work</p> <p>b. principal</p> <p>c. supervisor</p> <p>d. other teachers in building</p> <p>e. pupils</p> <p>12. Influence on pupils.</p>											
<p>II. ACADEMIC, PROFESSIONAL AND TECHNICAL EQUIPMENT</p> <p>1. General scholarship. (No special reference to degrees held.)</p> <p>2. Thoroughness of scholarship and training in particular specialty as demonstrated in subject taught.</p> <p>3. Ability to convey ideas by use of simple, clear and correct English.</p> <p>4. Professional interest and growth shown by:</p> <p>a. membership and participation in professional organizations</p> <p>b. credits in advanced academic, professional and technical courses</p> <p>c. travel</p> <p>d. articles and books published</p> <p>e. familiarity with professional literature</p> <p>f. contributions in the subjects of the school which the school system and the teaching profession</p> <p>Example: interest in extra-curricular activities; teacher welfare; investigations; expert advice; strong teachers and pupils; school and community spirit</p> <p>g. contributions in curriculum making</p> <p>h. improved teaching ability</p> <p>5. Appropriate knowledge of and sympathy with other departments.</p> <p>6. Quality of leadership demonstrated through:</p> <p>a. ability to organize material to individual ideas and power to influence others to adopt them</p> <p>b. recognition of such leadership by pupils, teachers and supervisors</p> <p>c. artistry in the manipulation of tools and machinery in the field of Industrial Education</p>											
<p>III. CONDITION OF CLASSROOM</p> <p>1. Good housekeeping in having everything in its right place.</p> <p>2. Adequate and immediate availability of all teaching material needed for the instruction.</p> <p>3. Position of pupils and advancement assignment to seats of those pupils who have some physical handicap, deficiency, defective sight and hearing, or weakened physical condition.</p> <p>4. Light, direction of regulation of window shades, centering of movable desks and tables to focus attention and avoid strong light glare; continuous attention to temperature and ventilation.</p> <p>5. Teacher's and pupils' schedule of the day's work in evidence.</p> <p>IV. DIRECT FACTORS IN THE TEACHING PROCESS (Check in one column opposite each item)</p> <p>A. (Continued)</p> <p>6. Constant reinforcement of the aim during the recitation.</p> <p>7. Discrimination in the selection of material appropriate to the realization of the aim, and the assignment of pupil activities necessary for such realization.</p> <p>8. Consciousness of the realization of the aim set or of specific progress toward its realization.</p> <p>9. Appropriateness of the aims set for the different lessons from the points of their relation to subject matter and to motivation.</p> <p>B. (Continued)</p> <p>1. Constant recognition of the laws of learning, such as readiness, exercise, effect, (Thorndike)</p> <p>2. Constant recognition that method of procedure must be based upon the constantly active interest and attention of the entire class.</p> <p>3. Selection of method of procedure, devices and technique of instruction based on psychological background.</p> <p>4. Proper use of process, intelligence tests, informal tests, and standard tests and examinations to determine the achievement of the class as a whole and the class as individuals, before taking up the work of a new term or a new unit of instruction.</p> <p>V. DIRECT FACTORS IN THE TEACHING PROCESS (Check in one column opposite each item)</p> <p>C. (Continued)</p> <p>4. Ability to utilize student responses in the development of a lesson.</p> <p>5. Ability to teach pupils how to read intelligently the subject matter in any study material and to select and arrange according to their importance the statements and facts contained in such subject matter.</p> <p>6. Ability to use skillfully illustrative material in textbooks and from other sources.</p> <p>VI. RESULTS (Check in one column opposite each item)</p> <p>1. Pupil ability to organize for own lesson material.</p> <p>2. Ability to suggest and to solve problems.</p> <p>3. Pupil ability to speak so that every one in the room can hear what is said by the one speaking.</p> <p>4. Pupil ability to get and to hold the attention of the entire class while discussing a topic logically and clearly.</p> <p>5. Ability to study and to work independently and to contribute the results of such independent study to group assignments.</p> <p>6. Ability to test the effectiveness of one's learning.</p> <p>7. Ability to cooperate with the teacher and the other pupils.</p> <p>8. Enthusiasm to continue further study along the lines presented.</p>											

THE PITTSBURGH TEACHERS' RATING CARD

The Six Principal Items of Rating Teachers in the Pittsburgh City School System.

the necessary processes to accomplish such objective, and a final consciousness that the objective has been achieved. There should be exercised careful discrimination in the selection of material appropriate to the realization of the objective and in the assignment of pupil activities necessary for such realization. Furthermore, skill in the operation of group technique manifests itself in a proper "mental set" on the part of pupils in undertaking a given unit of work. Final judgment on the quality of teaching procedure should give considerable weight to these elements of teaching technique.

A subdivision under "Direct Factors in the Teaching Process" emphasizes:

1. The proper use of pre-tests, intelligence tests, informal tests, and standard tests and examinations to determine the achievement of the class as a whole and the class as individuals, before taking up the work of a new term or a new unit;

2. The use of achievement tests at the close of a period of instruction to determine group and individual progress;

3. The skillful use of the findings of the foregoing tests in appropriate follow-up work.

The Real Test of Efficiency

At present there are available a great many of the foregoing types of tests for use by supervisors and principals, to determine the efficiency of instruction and to localize definitely the responsibility for efficient or inefficient teaching. In the larger cities the resources of departments of research are available for giving either some of the published tests or for the projection of original tests to meet the immediate needs of a particular school.

The final test of the efficiency of instruction is found in results in terms of desirable changes effected in pupils. Lewis² points out very marked tendencies among some of the scientific investigators in the field of education, Connor, Courtis, Franzen, Kent, Knight, and McCall, to judge the merit of teaching procedure wholly by the results of scientific measurements based on objective tests. The more nearly education becomes a science the greater weight is to be given

²Lewis, *Personnel Problems of the Teaching Staff*, Chap. 11.

to the results arrived at by the scientific measurement of pupil achievements. It will readily be conceded that there are factors in teaching procedure which do not lend themselves to scientific measurement—notably development in artistic appreciation in literature, music, painting, and the plastic arts. Also, the effect of activities carried on by pupils outside of school cannot be determined by scientific measurement, and yet such activities play a large part in effecting changes in pupil development.

In the meantime, it behooves us to amplify and to refine our standards of measurement to a point where they can be utilized to the best advantage by supervisors and teachers. Caution needs to be exercised also in the number and variety of tests attempted in any given term. The giving of tests for improving instruction is to be commanded. *That single purpose should be thoroughly understood by teachers.* To the extent possible, judgments of teaching procedure based on impression should be reduced to a minimum and the field for establishing judgments based on the results of objective tests should be constantly enlarged.

Improving Principals in Service

The greatest contribution to the solution of the problems incident to the rating of teachers is the development of principals into competent supervisors of instruction. This implies adequate training in the fields of instruction carried on in their buildings, aptitude for supervision, and relief from clerical details. The opportunities for refining the processes of instruction through the agency of principals are just beginning to be explored. The machinery necessary to inaugurate and to carry on an effective system of supervision through the medium of school principals is much more difficult to handle than is that required to direct a supervisory program emanating from the superintendent's office and carried on by supervisors proceeding from the central office. This point of view is not to be construed as an implication to eliminate directors of instruction and supplementary supervisors, members of the superintendent's staff. The point is that the principal should be regarded primarily as a supervisor of

instruction and that his services should be utilized for that purpose.

With this end in view the personnel department in the Pittsburgh schools has prepared, in the same manner as the "Program for Improving Teaching Procedure" was prepared, a "Program for Improving Administrative and Supervisory Procedure." This program includes: I. The Principal's Personal Equipment; II. His Academic, Professional, and Technical Equipment; III. Condition of Entire School Building; IV. Administration; V. Supervision.

This program is intended to furnish the principal a definite guide for administrative and supervisory procedure, to serve as a means for making an individual survey, and to provide opportunities for individual and group conferences with members of the personnel department and other members of the superintendent's executive staff.

A Greater Help to Teachers

It is the hope of the personnel department that the program submitted will result in the principal's becoming the greatest aid to teachers in improving their teaching procedure. It provides for the principal's aiding the professional growth of teachers through: (a) increasing teachers' ability to discover, analyze, and solve teaching problems; (b) practical demonstration in the classroom; (c) use of the supervisor; (d) urging observation of other teachers; (e) planning conferences of teachers by groups; (f) conferences with individual teachers; (g) guidance in reading professional and academic literature; (h) specific guidance in the pursuit of advanced studies; (i) use of achievement tests to determine definite progress pupils make during period of instruction given by teachers; (j) personal example.

It further provides for a standard by which a principal may be guided in evaluating the essentials of a complete unit of work carried on by any teacher in his building. The suggested list of such essential elements to be observed by him is as follows: (a) definiteness and completeness of lesson or activity assignment; (b) motivation; (c) aim; (d) effective use of illustrative material in textbooks and from other sources; (e) organization of teaching procedure; (f) clearness and effectiveness of presentation; (g) unmistakable evidence that the teacher has developed in pupils a successful method of attack in the unit of work taught and that he has led them to achieve the mastery of such unit of work; (h) evidence of ability on the part of pupils to challenge the validity of thinking; (i) pupil participation; (j) accuracy, permanency, and utility of the lesson learned.

The principal's record of his judgments based on the observation of teaching procedures covering several units of work is invaluable to the personnel department in its efforts to classify teachers properly in a scale of excellence.

The New Pittsburgh Salaries

The new teachers' salary schedule in Pittsburgh was recommended to the board of educa-

I. PERSONAL EQUIPMENT		Superior	Excellent	Good	Fair	Unsatisfactory
NOTE: It is assumed that the principal possesses an unimpaired character, is sane in person, and in possession of those qualities of mind and body which make a principal, in word and in deed, the representative and confidence of those with whom the principal comes in contact.						
1. Health and vigor	Ability to stand up under the work assigned					
2. Bearing or carriage	Poised self-possession					
3. Presence for and enjoyment of his work						
4. Atmosphere	Enthusiastic cheerful sympathetic					
5. Voice	Pleasing to hear, distinct enunciation of syllables and words, carrying power					
6. Use of English						
7. Vision	a. to discern problems of administration and supervision existing in his own school b. to anticipate new problems c. to analyze problems and properly distribute the different elements in such problems according to their value and importance d. to determine appropriate action for their solution e. to take advantage of opportunities for moral service and to assume leadership in such service					
8. Open-mindedness	a. to listen to the presentation of views by those directly interested b. to welcome, and to give credit for, constructive suggestions from parents, pupils, teachers, supervisors, and administrators c. to delegate responsibility d. to seek constantly for more efficient methods to operate his school					

II. ACADEMIC, PROFESSIONAL, AND TECHNICAL EQUIPMENT		Superior	Excellent	Good	Fair	Unsatisfactory
(Check in one column opposite each item)						
9. Industry	Steady application to the work					
10. Punctuality	Punctuality and cheerfulness in the performance of all school duties					
11. Thoroughness	Thoroughness in making out official reports					
12. Thoroughness	Thoroughness in work required of teachers and pupils					
13. Loyalty to	a. best interests of his school b. the teachers in the school c. the school system as a whole					
14. Dependability in	a. a confidence of responsibility b. working out of details of new problems					
15. Ability to meet unusual situations and emergencies with	a. self-control b. good judgment, sense of justice c. firmness d. optimism					
16. Ability to win and to hold	a. the respect and confidence of teachers b. the respect and confidence of pupils c. the respect and confidence of patrons d. the respect and confidence of professional associates					
17. Ability to get things done promptly and accurately through	a. the ready cooperation of assistants b. the delegation of responsibility					
18. Influence on pupils						

III. CONDITION OF ENTIRE SCHOOL BUILDING		Superior	Excellent	Good	Fair	Unsatisfactory
(Check in one column opposite each item)						
1. Good housekeeping	Is having everything in its right place					
2. Adequacy and immediate availability of all teaching material	Required by all departments					
3. Factors of pupils and advantage-taking position for them	pupils who have some physical handicap, deformity, defective sight and hearing, or weakened physical condition					
4. Light, direction of regulation of window shades, covering of movable desks and tables to focus attention and avoid strong light glare, continuous attention to temperature and ventilation						
5. Teachers' and pupils' schedules of the day's work in relation to						
6. Atmosphere of industry and good management in evidence throughout the building						
IV. ADMINISTRATION						
(Check in one column opposite each item)						
1. Adequacy of budgeting of time	Programs should be made for giving at least 50% of one's time to supervision					
2. Schedule for operating effectively the routine activities of the school	Examples: placing of classes, coming to and leaving the building, conduct of pupils during lunch periods and intermissions, method of distributing and collecting books and materials					

IV. ADMINISTRATION—(Continued)		Superior	Excellent	Good	Fair	Unsatisfactory
(Check in one column opposite each item)						
4. Program making in harmony with student needs and the course of study						
5. Carrying out the course of study, both as to content and time allotment						
6. Checking attendance through personal interest of teachers and through reports sent to office						
7. Enforcing the services of the custodian to the best advantage						
8. Provision for supervising pupils' health and conduct						
9. Economy in the care of books, supplies, light, and fuel						
10. Cooperating and counseling with teachers in school discipline						
11. Expedient organization of office routine	Examples: Keeping records in such manner that their information is most readily and quickly available					
12. Courtesy and prompt interviews with patrons						
13. Cooperation with Parent-Teachers' Association						
14. Effective handling of school assemblies, school entertainments, school publications, and school exhibits						
15. Organizing and directing student participation in the government of the school, in athletics, and in extra-curricular activities						

PRINCIPALS' AND SUPERVISORS' RATING CARD USED IN THE PITTSBURGH CITY SCHOOL SYSTEM

V. SUPERVISION		Superior	Excellent	Good	Fair	Unsatisfactory
(Check in one column opposite each item)						
10. The problem of safety and theft						
VI. SUPERVISION						
(Check in one column opposite each item)						
1. Program of supervision	Program of supervision, according to most immediate needs of school					
2. Grouping of pupils	Grouping of pupils at the beginning of the term by means of pre-tests, intelligence tests, and standard tests to determine the points of achievement of the class as a whole and the class as individuals and the outlining of appropriate provisions for subsequent effective instruction					
3. Adjustment of course of study	Adjustment of course of study in harmony with the needs of the different groups of pupils					
4. Special provision for pupils who need individual help or for any pupils in the school during extra help						
5. Degree of selection of (1) (2) (3) and (4) by means of the principal's thorough knowledge of his school, teachers, pupils, resources and social conditions of the community						
6. Confidential and constructive use of the "Program for Improving Teaching Procedure" at the beginning of each school year and at other times deemed advisable						

V. SUPERVISION—(Continued)		Superior	Excellent	Good	Fair	Unsatisfactory
(Check in one column opposite each item)						
7. Service of the principal in aiding the professional growth of teachers through						
a. stimulating teachers' ability to discover, analyze, and solve teaching problems						
b. practical demonstrations in the classroom						
c. use of the supervisor						
d. urging observation of other teachers						
e. planning conferences of teachers by group						
f. conferences with individual teachers						
g. guidance in reading professional and academic literature						
h. spending guidance in the pursuit of advanced studies						
i. use of achievement tests to determine definite progress pupils make during period of instruction given by teacher						
j. personal example						
8. Continuous recognition by both teacher and principal of appropriate methods of instruction based on sound educational principles, supplemented by the use of effective devices and technique						
9. Evaluation of teaching procedure based only on sound pedagogical principles recognized by both teacher and principal						
10. Observation of a complete unit of work and the evaluation of its essential elements						
a. definiteness and completeness of instruction						
b. motivation						

V. SUPERVISION—(Continued)		Superior	Excellent	Good	Fair	Unsatisfactory
(Check in one column opposite each item)						
c. auto						
d. effective use of illustration material in textbooks and from other sources						
e. organization of teaching procedure						
f. accurate and effective presentation						
g. unmistakable evidence that the teacher has developed in pupils a successful method of attack in the work taught and that he has led them to share the mastery of each unit of work						
h. evidence of ability to challenge thinking on the part of pupils						
i. student participation						
j. accuracy, personality and ability of the lesson taught						

tion by a committee composed of forty of the leading citizens of Pittsburgh. Among them were bankers, philanthropists, college and university presidents, lawyers, merchants, publicists, industrialists, and manufacturers. Acting under the direction of this committee, Charles Reittel, as Research director, visited many of the leading cities in the United States to investigate and study the salary schedule in operation. Upon recommendation of Mr. Marcus Aaron, president of the board of education in Pittsburgh, the citizens committee appointed the following as an advisory committee on the proposed schedules:

Thomas E. Finegan, president of Eastman Teaching Films, Inc., Rochester, N. Y.

Herbert S. Weet, superintendent of schools, Rochester, N. Y.

John W. Withers, dean of the School of Education, New York University.

A supplementary study of teachers' salary schedules in operation in many of the cities in the United States was made by a special salary committee appointed by the Pittsburgh Teachers' Association. This committee formulated the following declaration of principles:

1. We believe that the term *teacher merit* is to be defined as outstanding success in realizing the aims of education in terms of pupil achievement, and we believe that noncontributing abilities which lie outside of the field of teaching should not be recognized as teacher merit.

2. We recognize that teachers vary in efficiency and that it is just and desirable that they should be rewarded in salary according to the service which they render.

3. We believe that recognition of the merit principle in salary is necessary for the sound financing of any salary schedule which may be adopted.

Last December the board of education adopted the recommendations of the Citizens Committee on Teachers' Salaries in Pittsburgh. The provisions governing the new salary schedules are now being carried out.

The Schedules in Brief

Schedule A, including elementary teachers, kindergarten teachers, household-economy

teachers, in elementary centers, speech-improvement, adult-foreign, and home-class teachers who are fully qualified under state law, mental-deviate teachers, swimming teachers in elementary centers, teachers in special schools—open-air schools, children's hospital and home for crippled children, and advisers to girls who have not qualified as high-school teachers, provides for a minimum salary of \$1,200 and an automatic maximum salary of \$2,200 with 10 annual increments of \$100 each. Beyond the automatic maximum are five superior-teaching-level steps providing 5 additional increments of \$200 each. These are to be reached through recommendations made to the superintendent of schools by the associate superintendent in charge of personnel. The maximum percentages that may be recommended for the attainment of the superior-teaching-level steps over a period of 5 years are: 15 per cent at \$2,400; 12 per cent at \$2,600; 9 per cent at \$2,800; 6 per cent at \$3,000; 3 per cent at \$3,200. The number of teachers at the automatic salary of \$2,200 or above is used as the base to determine the foregoing percentages.

Schedule B, including junior-high-school teachers, continuation-school teachers, girls'-trade-school teachers, manual-training teachers in elementary schools and elementary centers, supervisors in the elementary and kindergarten field, pre-vocational school teachers, and advisers to girls who have qualified as high-school teachers, provides for a minimum salary of \$1,800 and an automatic maximum of \$2,850, with 6 annual increments of \$175 each. Beyond the automatic maximum are 5 superior-teaching-level steps providing 5 additional increments, 2 of \$175 each, and 3 of \$200 each. These are to be reached through recommendations made to the superintendent of schools by the associate superintendent in charge of personnel. The maximum percentages that may be recommended for the attainment of the superior-teaching-level steps over a period of 5 years are: 15 per cent at \$3,025; 12 per cent at \$3,200; 9 per cent at \$3,400; 6 per cent at \$3,600; 3 per cent at \$3,800. The number of teachers at the automatic salary of \$2,850 or above, is used as the base to determine the foregoing percentages.

High-School Salaries

Schedule C, including high-school teachers, Frick Training School teachers, and teachers in the boys' trade schools, provides for a minimum salary of \$1,800 and an automatic maximum salary of \$3,200, with 8 annual increments of \$175 each. Beyond the automatic maximum are 5 superior-teaching-level steps providing 5 additional increments of \$200 each. These are to be reached through recommendations made to the superintendent of schools by the associate superintendent in charge of personnel. The maximum percentages that may be recommended for the attainment of the superior-teaching-level steps over a period of 5 years are: 15 per cent at \$3,400; 12 per cent at \$3,600; 9 per cent at \$3,800; 6 per cent at \$4,000; 3 per cent at \$4,200. The number of teachers at the automatic salary of \$3,200 or above is used as the base to determine the foregoing percentages.

Principals' Salaries

Schedule E, including principals of elementary schools, is as follows:

Modified Schedule		
Group	Minimum & Automatic Maximum	Minimum & Maximum for Superior Service
Group A 6-9 Teaching Units	\$2350-2750 Increments 2 at \$200	\$2750-3260 Increments 1 at \$200 1 at \$250
Group B 10-15 Teaching Units	\$2650-3250 Increments 3 at \$200	\$3250-3600 Increments 1 at \$150 1 at \$200
Group C 16-19 Teaching Units	\$3150-3850 Increments 3 at \$200 1 at \$100	\$3850-4250 Increments 2 at \$200
Group D 20 Teaching Units and over	\$3150-4250 Increments 5 at \$200 1 at \$100	\$4250-4750 Increments 2 at \$250

Note: By Special action of the Board to \$6000

Schedule G, including high-school-principals, junior-high-school principals, Frick Training School principal, boys'-trade-schools principals, girls'-trade-schools principals, and the continuation-school principal, is as follows:

All Principals,	\$4,250-5,250	\$5,250-5,750
Junior and Senior High Schools, Trade schools, Frick Training, Continuation School	(10 months) Increments 4 at \$250	(10 months) Increments 2 at \$250

Note: By Special action of the Board to \$7,500

The percentage of principals that may be advanced to the superior service levels is limited to 25 per cent, computed on the number of principals at the automatic level in any particular group of principals, as a base.

It is the function of the personnel Department to recommend to the superintendent of schools those teachers and principals whose services are regarded as of a superior quality. As bases for such recommendations the procedure indicated in this discussion has been presented in detail.

Principles of Advancing the Salaries of Teachers

Ridgley C. Clark, Seymour, Connecticut

(Concluded from March)

Advanced Degrees. Comparatively few places recognize the doctor's degree on the salary schedule for the obvious reasons that few cities and fewer towns employ or hope to employ many teachers with this degree. On the other hand, we find that practically all the single-salary schedules have a special level for the holder of a master's degree. Many schedules based on position have a provision that teachers who have a master's degree shall receive a higher salary than they otherwise would. Others establish a supermaximum which may be attained only by those who have this degree.

It is desirable to employ teachers with a master's degree, especially in our high schools. People who hold this degree have had a more extended training in their particular field, and in addition have usually made a more extensive study in underlying purposes of and effective procedures in teaching their subject. With equal intelligence and experience, they should do more productive work in the classroom than the people who have simply met the minimum requirement of preparation. If we wish teachers to assume the added expense of the one or two years' extra preparation represented by the master's degree, it is probably necessary, and surely fair, to place them on a commensurately higher scale of salaries.

Values of Advanced Degrees

The adoption of a special schedule, if adequate, will secure people who already have this degree and encourage others to obtain it while in service. The supermaximum for teachers with the master's degree would probably work as a rule only for the master's degree obtained in service. This will affect few people.

That the traditional requirements for the bachelor's and master's degrees do not necessarily make the greatest possible contribution to teaching efficiency in the grades or high school is recognized by some school authorities as evident. We find statements to the effect that teachers will be expected to obtain their degrees in courses that will better prepare them for the work they are doing or are planning to do.

The possession of a bachelor's degree does not necessarily signify superior training for teaching in the lower grades. It is probably true that the two-year normal-school graduate will do better work in these grades than the college graduate who has taken the conventional course at many colleges. Teaching is both a science and an art. If a bachelor's degree represents a more thorough training for efficiency on the job, then and then only, are we justified in encouraging that our grade teachers possess it. For years of well planned training may be much more effective if they are not so organized as to meet the present requirements for the bachelor's degree in many of our colleges and universities.

It is necessary that the teacher shall have a store of knowledge, but she must know how to teach, to use methods that are psychologically and sociologically correct. She must be not only a scholar, but in the strictest sense, a teacher. Additional education above the minimum should broaden, but at the same time give a comprehension of the immediate objectives of education and increase skill in teaching. Those who base the salary schedule on degrees should consider this and safeguard the schedule so that these degrees may be of greatest significance.

Increases for In-Service Training

In-Service Training. To the writer the most important arguments for and against salary credit for in-service training by summer-school courses seem to be that it "makes possible an

intermingling of theoretical training and practical experience over a number of years." Teaching is a progressive occupation. Those who do not study fail to advance in efficiency and are behind the times. Teachers should maintain the student attitude. Those opposing question the value of summer courses and fear for the health of the teacher. Much the same arguments are used for and against the encouragement of courses taken during the school year with the added argument that these courses may tend to distract the attention of the teacher from her classroom work.

One is impressed with the variety of principles, some of them contradictory, illustrated by the practice. This is encouraging as it indicates that school authorities instead of blindly copying are seriously thinking on this important feature of the salary schedule. On the other hand, it suggests the need of much scientific investigation.

Where credit is given, it is usually provided that courses to be credited must have the approval, usually in writing, previously to the undertaking of the course, of the superintendent or the school board.

This principle is mentioned in almost every case where rules are given. It seems a wise provision. The superintendent can, if he is informed, so direct the selection of courses that they will be of maximum use to the teacher in improving her professional equipment. Courses should be selected in accordance with the individual needs of the teacher.

Psychology of In-Service Training

Where there is such varied and conflicting practice and where there is so little evidence which may be called authoritative, any conclusions must be based wholly on reasoning. To the writer the following seems sound:

Study undertaken because of a felt need is likely to result in immediate and permanent improvement in teaching. It is a part of the function of supervision to awaken a consciousness of this need, to assist the teacher in the task of selecting the appropriate course, and to help her in applying it to her future practice. It is the task of the schedule-maker to make it financially possible for teachers to take desirable courses. A small increment, made a permanent addition to teachers' standing, and leading to a supermaximum, has these justifications. If the teacher has of her own initiative, or through the aid of supervision, made her added knowledge improve her present practice, there is full justification of the immediate increment. Our psychology teaches that present activity is one of the surest methods of making practice permanent. This would seem to indicate that the teacher who has assimilated additional training will be a better teacher than she would have been without it and would justify a supermaximum.

To be valuable, courses taken should have one objective: to improve the teaching. To have a learned teaching staff should not be the principal motive of the administrators. Financial profit should not be the chief motive of the teacher. It is quite possible to stress courses to the point where teachers and administrators alike consider the accumulation of credits as aims in themselves. This is the danger where too rapid accumulation of courses is encouraged or too high financial consideration given. Hence, the value of limiting the number of courses which may be credited in any year and of making the added financial return appropriate rather than too stimulating.

Does Travel Improve Teaching?

Travel. It has long been considered axiomatic that travel is a great educator. A conception of the natural phenomena in this and other countries is gained by personal observation. An appreciation of the ideas, the ideals, the social, esthetic, and economic customs and standards of other people often are gained by personal contact through travel. The traveled person is usually interesting, informed, tolerant. These qualities are desirable in a teacher. Of the possibility of development by travel there can be no doubt. The granting of increments on account of travel, however, presents difficulties. Many people acquire valuable experience by travel, some merely improve their bridge game. The marks which a teacher receives indicate whether or not courses are undertaken seriously by her. There does not seem to be any definite check on the seriousness of travel as education. Much depends on the traveler. Colleges do not recognize educational travel to the extent of giving credit toward degrees. On the other hand, travel is more expensive than summer-school attendance. A study of the effect of travel on classroom performance would be interesting. Certainly the teacher of social science who has actually seen the places of significance in these fields ought to be more able to make the subject live. It would seem, however, that the itinerary should be approved and that there should be some definite check upon the way time is spent.

The Difficulty of Recognizing Merit

Merit. All the factors which are recognized in the schedule are doubtless so recognized because they contribute toward merit. All other things being equal, the teacher with the superior training and extensive experience is a better teacher than the one with limited training and experience. Critics of our schedules say that the weakness is that all other things are not equal. To assume that all teachers profit equally by a year of classroom experience or of training, is to assume that which is not true. All do not learn equally from experience. Some teachers pass courses with a mark at A while others merely pass. Some apply the knowledge they obtain, others do not. Experience and training as criteria for determining teaching merit fall short in that they indicate what results should be expected, but do not determine the actual value of the activities of the teacher. The personality factor, intelligence, zeal, judgment, understanding, all the qualities that make a trained and experienced teacher productive of worth-while service are disregarded in the salary schedule. The schedules are too mechanical. As a stimulating agency they are a failure. The purpose of the salary schedule is to secure good teachers. These critics advocate various kinds of merit schedules:

1. A living wage, to which increments may be added for meritorious service.
2. A minimum salary based on position, to which merit increments may be added.
3. A minimum salary based on training, to which merit increments may be added.

Additional Pay for Merit

The arguments against such schedules are that they are difficult to administer. Teaching results are too intangible, evaluation too subjective for the establishment of a graduated merit scale. While the development of more objective measurements of teaching results may make teacher rating more accurate, they are as yet imperfect and cover only a few phases. Such

(Concluded on Page 142)

What Superintendents Ask Applying Teachers

Analysis of Application and Reference Blanks

Ray Franklin, Theodore Roosevelt High School, Fresno, California

Much depends upon the selection of an efficient teaching staff. The superintendent must find means whereby he can obtain the information which is necessary for judging the qualifications of the applicants. This information must be as complete as possible and be set forth in a definite and comprehensible manner.

The superintendent must decide which information is relevant and which is irrelevant to proper selection. On this point, relatively few superintendents have agreed, if application blanks and reference blanks now in use can be taken as a basis for judgment.

"It is doubtless true that in a large sense no information about a candidate for a position in the public schools can be considered irrelevant. But there is no gainsaying the fact that some points are more important than others, and that in the very nature of things a complete description or 'teacher-graph' is impossible. There is no evidence that the superintendent who collects exhaustive and meticulous accounts of the qualifications of candidates is more successful in his choices than are those who scrutinize carefully a few outstanding essentials. In reality, the chances of a wiser selection are decidedly with the latter."¹

The writer has made an analysis of the application blanks used in 44 of the largest cities of the United States. The following are the items called for in the various blanks, arranged in order of their frequency:

1. Education	44
High School	44
College or University	44
Normal School	41
2. Marital Status	44
3. Experience	42
4. Age	42
5. Defect	42
6. Certificate	36
7. Position Wanted	33
8. Health	30
9. Can Teach	28
10. Weight	28
11. Height	28
12. When Available	24
13. Special Subjects	24
14. Photograph	24
15. Last Salary	23
16. Church	20
17. Where Born	20
18. Race—Nationality	18
19. Courses in Education	18
20. Salary Expected	17
21. Number of Children	17
22. Citizen of the United States	17
23. Graduate Study	16
24. Summer Schools Attended	15
25. Present Position	15
26. Elementary Education	12
27. Why Leave Present Position	10
28. Professional Reading	8
29. Other Experience	8
30. Member of Societies	7
31. Maiden Name	7
32. Ages of Children	6
33. Sex	5
34. Failed of Reelection	5
35. Special Courses	5
36. Membership Professional Organizations	5
37. Extension Classes Attended	5
38. Belong to Secret Society	5
39. Use Tobacco	4
40. Social Service—Community Work	4
41. Attend Teachers' Meetings	4
42. Number of Teachers in Last School	4
43. Time Lost on Account of Illness	3
44. Grades in Subjects	3
45. Willing, at Own Expense, to Call for Interview with Superintendent	3
46. Travel	3
47. Nationality of Father or Mother	3
48. Special Qualifications	3
49. Honors Won	2
50. Foreign Languages	2
51. Avocational	2
52. Play Piano for Opening or Closing Exercise	2
53. Musical Instrument Played	2
54. Occupation of Husband	2
55. Mental Test Score	2
56. Attend District and State Education Association Meetings	2
57. Greatest Number of Pupils Enrolled	1
58. Teaching a Business	1

59. Color of Hair	1
60. Color of Eyes	1
61. Complexion	1
62. Locality Preferred	1
63. Use Intoxicants	1
64. Use Narcotics	1
65. Wear Glasses	1
66. Fond of Outdoors	1
67. Parents' Birthplace	1
68. Family History	1
69. Other Physical Defects	1
70. How Long Expect to Teach	1
71. When Last Examined and Accepted by Life Insurance Company	1
72. Immunized Against Disease	1
73. Plans for Further Education	1
74. Affirm and Pledge Loyalty to Nation, Government and Flag	1
75. How Spent or Expect to Spend Summer Preceding Year for which Application is made	1
76. Branches of Athletics Coached or Willing to Coach	1
77. Do You Engage in Sunday School Work?	1
78. Familiar with what System of Primary Reading	1
79. Made Personal Application	1
80. Welcome Suggestions	1
81. Successfully Vaccinated	1
82. Become Permanent Resident of State	1
83. Willingly Accept all Visitations from Supervisors	1
84. Where Last Employed Previous to Present Position?	1
85. Two or More Standards by which You would be Satisfied to have Your Teaching Supervised	1
86. If Elected, Would Devote Energy to Teaching Exclusively	1
87. Mental Examination Taken	1
88. Worked Harmoniously with Associates	1
89. Happy in Work as Teacher	1
90. World War Service	1
91. Character Reference	1

From the analysis made, the following conclusions can be drawn. Those persons who gather the data in relation of applicants are fairly agreed that it is necessary to have information of the candidate's training, and experience, marital status, age, grade of certificate held, and position wanted. From 20 to 30 are agreed as to the importance of knowing about the health, height, weight, when available, etc. From 10 to 18 are agreed upon the importance of knowledge of race of the applicant, courses taken in education, salary expected, number of children, defects, citizenship of applicant, graduate study, summer schools attended, present position, elementary education, and why the applicant is leaving his present position. None of the other data collected is considered relevant by more than eight of the superintendents reporting.

In view of this fact, then, would it not be well to adopt a form which embodies those essentials which a majority are willing to recognize? The writer wishes to recommend the forms used by the following cities for consideration in this regard: Cedar Rapids, Iowa; Los Angeles, Calif.; Schenectady, N. Y.; Portsmouth, Va.; St. Paul, Minn.

The Los Angeles and St. Paul application blanks are to be accompanied by health certificates filled out by a physician certifying as to the health of the applicant. This feature is commendable. It gives exact information and is much more definite than can be obtained in any other manner. The health of the candidate is vital to his chances for successful service, and a method by which it is accurately measured is far superior to any other which trusts only to his opinion or to the opinion of his references.

In each of the blanks given, certain information is requested which is of local importance only. Such questions are permissible on an application blank so long as they do not make the blank unnecessarily long and difficult to interpret. In the Los Angeles blank, for example, information is requested in regard to previous applications. The St. Paul blank, however, appears to have certain questions which are of rather doubtful value or which could better be included on the health certificate. The writer refers especially to such questions as: Complexion, and Date of Last Vaccination.

The forms used in Schenectady and Cedar Rapids are of convenient size, and can be filed in a drawer for size 4 by 6 inch cards. This feature would appear to be of great value to a school executive who has a large number of applications to consider.

Copies of the reference blanks used in 26 cities were examined for the purpose of finding out which items are considered most essential in determining fitness of the applicant for a teaching position. It is rather significant to note that there is no item upon which all are agreed as to its importance:

Following is a list of items included in the reference blanks, arranged in order of their frequency:

1. Cooperation	22
2. Grade of Subject Best Qualified to Teach	19
3. Discipline	19
4. Instructional Skill	19
5. General Rating	18
6. Health and Physical Vitality	17
7. Personal Appearance	16
8. Scholarship	15
9. Character	13
10. Would you Employ	13
11. Mental or Physical Defects	12
12. Personality	11
13. Evidence of Preparation	11
14. Professional Attitude	11
15. Dates Between Which the Applicant was Under Your Supervision	10
16. Place of Observation	10
17. Loyalty to Associates and Officials	10
18. Influence on Pupils	9
19. Capacity for Results	8
20. Sympathetic Relations to Pupils and Parents	8
21. Originality and Initiative	7
22. Tact	7
23. Industry	7
24. Peculiarities	7
25. Efforts Toward Professional Growth	6
26. General Culture	6
27. Self-Control or Poise	6
28. Common Sense—Discretion	6
29. Mental Alertness—Intelligence Quotient	5
30. Voice	5
31. Taste in Dress	5
32. Official Relation to Candidate	5
33. Daily Preparation	5
34. Management of Details	5
35. Interest in Community Life	4
36. Success of Applicant While in Your System	4
37. Has the Applicant Ever Failed of Reappointment or Been Discharged?	4
38. Any Reason Why We Might Not Wish to Employ Her	4
39. Energy and Enthusiasm	4
40. Force	3
41. Standing and Influence in Community	3
42. Understanding of Children	3
43. Strongest Points	3
44. Weakest Points	3
45. Department of Applicant	3
46. Why did Applicant Leave Position Under Your Supervision?	3
47. Do you Recommend This Person as a Successful Teacher?	3
48. Response to Supervision	3
49. Neatness of Room	3
50. Special Talent	2
51. Adaptability	2
52. Command of English	2
53. Accuracy and Promptness in Handling Reports	2
54. Possibilities of Growth	2
55. Mixer—Social Qualities	2
56. Desirable Person to Have in a Corps of Teachers	2
57. Does Applicant Carry Social Activities to Excess?	2
58. Why Leaving Present Position	2
59. If Teaching for You at Present, What is Salary?	2
60. If Applicant did not Teach under your Supervision, how did You get Your Impression Concerning Him?	2
61. Definiteness of Aim	1
62. Type of Position Held by Applicant	1
63. Promise of Success	1
64. Mental Traits—Disposition	1
65. Ideals of Order	1
66. Care of Physical Property	1
67. How Often Able to Observe	1
68. How Long Known Candidate?	1
69. Professional Leadership	1
70. Is Applicant Neat and Orderly in Habits?	1
71. Is He Helpful in Extracurricular Activities?	1
72. Interest in Teaching as a Profession	1
73. Attention to Heat, Light, and Ventilation	1
74. Punctuality	1
75. Moral Influence	1
76. Was he Actively Interested in Pupils Apart from Classwork?	1
77. What is the Spirit of the School?	1
78. Does he Criticize Schools and Officials?	1
79. Does Applicant use Tobacco, Liquor, or Narcotics?	1
80. Relative Rank in Your Corps of Teachers	1
81. Is he Prompt in Meeting Financial Obligations?	1

(Concluded on Page 142)

¹John C. Almack, "The Selection of Teachers," *American School Board Journal*, Vol. 61, pp. 29-31, November, 1920.

The Legal Dismissal of Teachers

E. C. Coatney, Superintendent of Schools, Yates City, Illinois

The purpose of this paper is to show the numerous causes and conditions under which teachers may be dismissed from their positions when they are under contract to teach, and also to point out some of the things which the courts have held as causes for terminating teachers' contracts.

The Right to Dismiss in General

In some states there have been legal provisions whereby a teacher, or at least certain teachers, might be dismissed at any time at the pleasure of the board, even though their term of service had not expired.¹ Especially has this been true where the teacher had no fixed term of employment.² The general rule seems to be, however, that where a teacher is under contract for a definite term, he may not be dismissed until the end of the term of his employment,³ unless sufficient cause is shown that his service should expire at a previous time.⁴

If there are provisions within the statutes which specifically state the cause under which a teacher may be dismissed, ordinarily, he can be dismissed for no other cause,⁵ unless the contract contains other agreements which might furnish additional causes for dismissal.⁶ A teacher cannot be removed from a higher to a lower grade,⁷ or even to a higher grade or department, unless the work is the same level as that of the first employment, and the offer of the new position is such that its acceptance will not amount to a modification of the original contract.⁸ In California, the removal of a teacher to a lower grade is as much a violation of the statute, as if she had been dismissed and not given another position.⁹

Powers of Dismissal

The power of dismissal, and the nature and extent of such power, is usually regulated by school law,¹⁰ or by the rules and regulations made by the local school board so long as they comply with the law.¹¹ This power is generally given to the school board, or other employing agency, which is responsible for the managing and controlling of the school.¹² The statutes may provide for this power to be placed in some particular officer, or body, other than the board of education.¹³ However, where a teacher is employed by a contract with subscribers, he cannot be dismissed by the board.¹⁴ The fact that a board has tolerated the teacher's conduct and inefficiency for a time, does not operate as a

waiver to its right to discharge him therefor.¹⁵ However, a school board having authority to dismiss a teacher cannot arbitrarily exercise such powers for personal reasons, but must use discretion and judgment.¹⁶ Where a board has dismissed a teacher, it may reconsider its action.¹⁷

Causes of Dismissal

As a general rule, a teacher may be removed from his position before the expiration of his term of service, for any cause that renders him unfit to be a teacher in the public school, so that the best interests of the school require that he should be removed or dismissed.¹⁸ If a teacher, or superintendent, shows by his conduct that he is unable to manage a school, and cannot maintain the proper discipline, he may be dismissed¹⁹ or if he outwardly disobeys the rules and regulations of the board.²⁰ It has been held that where a teacher after due notice, refuses to obey a rule prohibiting the reading of the Bible in the public school, and other religious exercises, and continues such exercises, such act of insubordination is a violation of his contract for which he may be dismissed.²¹ If a board has a rule requiring all teachers to be vaccinated, and the teacher fails to comply, she may be dismissed.²² The refusal of a teacher to take back a pupil when suspension has been lifted by the board, is sufficient cause for removal.²³

Incompetency is a common cause of dismissal. Where a teacher in a public school, although he has been employed for a definite length of time, proves to be incompetent and unable to teach the branches of instruction he is employed to teach, either from a lack of learning or from an utter lack of capacity to impart learning to others, he may be discharged from such employment.²⁴ Cruel treatment and profane and abusive language toward pupils constitutes "incompetency or immorality" within a provision authorizing the dismissal of teachers for such causes.²⁵ Failing to have the requisite qualifications of temper and discretion of a good teacher justifies a teacher's dismissal.²⁶

"One of the male pupils asked the teacher if he had said that he (the pupil) was the dullest pupil in school. After some colloquy between them, the teacher in anger struck the pupil on the head so violently that he fell against a seat in the room, and the teacher seized him and forcibly put him into a seat. The directors investigated the matter in the presence of the school, and for this purpose examined some of the pupils; the teacher being present, interrupted some of the pupils during their answers to inquiries by the directors and called them liars."²⁷

It was held in the above case that the teacher did not possess the requisite qualities of temper, discretion, and fortitude of a good teacher, and that the directors were justified in discharging him. Mistakes in occasional instances, one, two, or even more, will not show that a teacher is incompetent to teach that subject or branch of instruction in which the mistakes are made.²⁸

Incompetency Must Be Proved

A teacher cannot be dismissed before rendering any service, for incompetency, where he has a proper certificate and has been employed by the board with knowledge of his qualifications.²⁹ If scholars and parents are dissatisfied, this is insufficient cause for dismissal.³⁰

Negligence and inattention to duty where proved is sufficient cause for dismissal.³¹

"Where a school teacher leaves his place in the school, placing a substitute in charge, and fails to resume his place when requested by the principal having charge of the school, and when asked for an explanation by the directors gives none, except that he has furnished a competent substitute to teach in his place and will resume as soon as vacation is over, it is a good cause for his removal."³²

"Where one teaching school in the fall and winter season is tardy from 15 to 30 minutes, two or three days per week, and has the key to the door of the schoolhouse in his pocket so that the school children cannot enter until he comes, and the directors repeatedly expostulate with him for his tardiness, but without effect, they have a legal right to dismiss him for that reason."³³

Wherever there is an unavoidable delay in the opening of the school at the beginning of the term, and the teacher arrives two or three days late, there is no reason for her discharge.³⁴ Absence of three months, however, without leave, and with the excuse of bearing a child was held a neglect of duty, and the teacher was subject to dismissal.³⁵

The discharge of a teacher for allowing a schoolhouse to become dirty is not justified, in view of his uncontradicted testimony thereto that the community was accustomed to have public gatherings, and he cleaned it as soon as possible afterwards.³⁶ Chewing tobacco and spitting through the windows was held to not justify a charge.³⁷ However, improper conduct of the teacher in such manner as to interfere with his position has been held as grounds for dismissal.³⁸ A school board may not fix a teacher's boarding place, and make residence of the teacher at such place a condition of her contract of employment.³⁹ However, in San Francisco a regulation by the board of education, requiring teachers and other employees to reside within the city and county has been held as a reasonable exercise of power under the San Francisco charter, art 7, c. 3, par. 1, empowering the board to make necessary regulations for the government and efficiency of the schools.⁴⁰

Grade of Certificate Not Essential

Where a contract for teaching states that the person contracting to teach holds a second-grade certificate, the fact that after the contract was executed and before his school began, he took an examination to teach, as his certificate had expired, wherein he only received a third-grade certificate, did not justify a rescission of the contract by the school district, in the absence of a stipulation in said contract that it should terminate if he failed to receive a second-grade certificate.⁴¹ Where a contract does not

¹Stockton v. San Jose Bd. of Ed., 145 Calif. 246, 78 Pac. 730.
²Kennedy v. San Francisco Bd. of Ed., 82 Calif. 483, 12 Pac. 1042.

Gillan v. Normal Schools, 88 Wis. 7, 58 N. W. 1042.
³Weatherby v. Chattanooga Bd. of Ed., 48 S. W. 136.
⁴People v. New York Bd. of Ed., 69 Hun 212, 23 N. Y. S. 473, 37 N. E. 565.

Jones v. Nebr. City, 1 Nebr. 176.
⁵McClellan v. St. Louis Public School, 15 Mo. App. 362.

⁶Marion v. Oakland Bd. of Ed., 97 Calif. 606, 32 Pac. 643.
⁷Marion v. Oakland Bd. of Ed., 97 Calif. 606, 32 Pac. 643.

⁸Wallace v. School Dist. No. 27, 50 Nebr. 171, 69 N.W. 772.
⁹Ottawa v. Bd. of Ed., 3 Kans. App. 269, 45 Pac. 119 (Others).

¹⁰Barthel v. San Jose Bd. of Ed., 153 Calif. 376, Pac. 892.
¹¹Kennedy v. San Francisco Bd. of Ed., 82 Calif. 483, 22 Pac. 1042.

¹²School Dir. v. Ewington, 26 Ill. App. 379.
¹³Wallace v. School Dist. No. 27, 50 Nebr. 171, 69 N.W. 772.

¹⁴Fairchild v. San Francisco Bd. of Ed., 107 Calif. 92, 40 Pac. 26.

¹⁵Kennedy v. San Francisco Bd. of Ed., 82 Calif. 483, 22 Pac. 1042.

¹⁶Jackson v. Steamboat Rock, Ind., School Dist., 110 Iowa 313, 81 N.W. 596.

¹⁷Kennedy v. Bd. of Ed., 82 Calif. 483, 22, Pac. 1042.
¹⁸Arnold v. School Dist., 78 Mo. 226.

¹⁹People v. N. Y. Bd. of Ed., 23 N. Y. S. 473, 37 N.E. 565.
²⁰McClellan v. St. Louis Public Schools, 15 Mo. App. 362.

²¹People v. Maxwell, 177 N. Y. 494, 69 N.E. 1092.
²²Bays vs. State of Nebr. 6 Nebr. 167.

²³Mason v. Brookfield School Dist. No. 14, 20 Vt. 487.
²⁴Carver v. Battle Creek Tp. H. S. No. 6, 113 Mich. 524, 71 N.W. 859.

²⁵Armstrong v. Sch. Dist. No. 19, Mo. App. 462.
²⁶Putman vs. Irvington School Town, 69 Ind. 80.

²⁷Henerson v. Hammond, 19 Ala., 340.

²⁸School Dist. v. Maury, 53 Ark. 471, 14 S.W. 669.

²⁹School Dist. v. Gautier, 13 Okla. 194, 73 Pac. 954.

³⁰Kellison v. Cascade Co. Sch. Dist. No. 1, 20 Mont. 153, 50 Pac. 421.

³¹Ft. Smith School Dist. v. Maury, 53 Ark. 471, 14 S.W. 669.
³²Robinson vs. Dist. No. 4 Sch. Dir., 96 Ill. App. 604.

³³McClellan v. St. Louis Public Schools, 15 Mo. App. 362.

³⁴Kennedy v. San Francisco Bd. of Ed., 82 Calif. 483, 22 Pac. 1042.

³⁵New Antioch Bd. of Ed. v. Pulse, 7 Ohio N. P. 58.

³⁶Lyndell v. Phila. H. S. 19 Pa. Super Ct. 232.

³⁷Crawfordsville v. Hays, 42 Ind. 200.

³⁸Arnold v. Sch. Dist., 78 Mo. 226.

³⁹Robinson v. Dist. No. 4 Sch. Dir., 96 Ill. App. 604.

⁴⁰Holden v. Shrewsbury Sch. Dist. No. 10, 38 Vt. 529.

⁴¹Farrell v. Rubicon Twp. Sch. Dist. No. 2, 98 Mich. 43, 56 N.W. 1053.

⁴²Paul v. Hartland School Dist. No. 2, 28 Vt. 575.

⁴³School Directors v. Hudson, 88 Ill. 563.

⁴⁴School Dir. v. Birch, 93 Ill. App. 499.

⁴⁵Turner v. Hampton, 97 S.W. 761.

⁴⁶People ex rel Peixotto v. Bd. of Ed. City of N. Y., 212 N. Y. 463, 106 N.E. 307, L. R. A. 1916 C 795.

⁴⁷Parker v. Jefferson County School Dist. 5 Lea (Tenn.) 525.

⁴⁸Ottinger v. School Dist., 157 Ark. 82, 247 S.W. 789.

⁴⁹Morley v. Power, 10 Lea (Tenn.) 219.

⁵⁰Horne v. School Dist., 75 N. H. 411, 75 Atl. 431.

⁵¹Stuart v. Bd. of Ed. 161 Calif. 210, 118 Pac. 712.

⁵²School Dist. No. 23 v. Ozmer, 81 Ark. 194, 98 S.W. 974.

specify any definite duration of time, but provided for the closing of school under certain circumstances, it was held that the said contract continued for the year, and that the teacher was entitled to teach for that period, subject to the contingencies specified in the contract.³⁹ In the absence of a stipulation in the contract to the contrary, under the existing statute, a qualified teacher cannot be discharged at the pleasure of the district, but only where just causes exist therefor.⁴⁰

A clause in the contract of hiring between a school district board and the teacher of the district school, by which the board declares that "we reserve the right to close the school at any time if not satisfactory to us," was held to be unauthorized by law and inoperative. The court states:

"We think the good order and usefulness of the schools would be greatly prejudiced by holding that the boards had any such power. If the power claimed by the board in this case exists, and may be enforced, then the public schools must be taught to suit the whims, caprices, and peculiar notions of the hiring board, and not as the teacher, in the conscientious discharge of his duty, should teach the same."⁴¹

Teachers and Unprofessional Conduct

In another case in which contract was written in statutory form, and without stating the term of employment, on the face of which the board had written the words, "The directors reserve the right to annul all contracts every four months," the court held that the directors could not at the end of the three months, dismiss the teacher without notice or hearing.⁴²

Statutes allowing school boards to dismiss teachers for unprofessional conduct have been held not void, because of allowing too much discretion to boards in dismissing teachers.⁴³ It has been held that a teacher may be dismissed where, by a change in the conduct of the schools, his services are no longer needed,⁴⁴ or where the funds for maintaining a school have become exhausted.⁴⁵

Immorality is a valid cause of removal,⁴⁶ and a teacher can be dismissed without entering upon a contract, if found guilty.⁴⁷

"Ability to teach the branches prescribed by the statute does not alone qualify a person to teach our youth. In addition thereto, they should be persons who for their known virtue and morality are fitted to be trusted with the dearest treasures of the father and mother—the person and mind of their child. They should be entitled to, and receive the entire confidence, of the patrons and public. If a suspicion of vice, or immorality, be once entertained against a teacher, his influence for good is gone."⁴⁸

Even the pendency of an indictment for adultery, and the proceedings thereupon, against a superintendent of schools is sufficient cause for his discharge by the authority employing him,⁴⁹ or a reputation for immorality, although not supported by ground for removal.⁵⁰ However, in most cases it has been held that a chance for a hearing must be given to the accused before dismissing him.⁵¹

"A good character is a necessary part of the equipment of a teacher. Take this away, or blacken it, and the doors of professional em-

ployment are practically closed against him. Before this is done there should be at least a hearing, at which the accused may show that the things alleged are not true, or if true, are susceptible of an explanation consistent with good morals and his own professional fidelity. We think it is plain, too plain for serious discussion, that the action of the trustees was irregular and unjust to the appellant."⁵²

Politics Not Reason for Dismissal

The mere fact that a teacher or superintendent is engaged in politics, even though it may consist in the election of board members, is not sufficient cause for dismissal. Said the court:

"There is also testimony on the subject of the plaintiff's activity in school politics, that he entered with a considerable degree of activity into the campaign, and that he made a speech at one of the meetings just prior to the school election of 1920. It is difficult to draw a line of demarcation between the political rights of a school teacher, or others engaged in educational work, with respect to activity in politics. Certainly they are not denied the right of free speech, or the right to a reasonable amount of activity in all public affairs. There is, however, a limit to such an extent that their usefulness in the work for which they are employed shall not be impaired. The zeal in political activity must not carry them to such a degree of offensive partisanship that their usefulness in educational work is impaired, or proves a detriment to the school interests affected by their service. It does not appear to us that evidence in this case shows any such over zeal or activity on the part of the plaintiff. It is not contended that the school's interests were injured, or that the efficiency of the school work in that district was lessened."⁵³

However, where a teacher has advocated the election of a candidate before public-school pupils, it may be considered as unprofessional conduct, and suspension by the board is legal.⁵⁴ If a superintendent has been elected to office after being illegally dismissed by a school board, and when suing for the balance of his salary, he cannot deduct the expenses of his campaign from the amount earned while mayor in determining the amount recoverable by him.⁵⁵

The courts have held that, unless there has been a stipulation in the contract by statute, a woman teacher who marries during the year cannot be discharged. Marriage in some states

³⁹Trustees of State Normal School v. Cooper, 150 Pa. St. 78, 24 Atl. 348.

⁴⁰Gardner v. N. Little Rock Sch. Dist., 161 Ark. 466, 257 S. U. 73.

⁴¹Goldsmith v. Bd. of Ed. of Sacramento City, 63 Calif. App. 141.



MR. F. W. BOWERS,
Clerk and Treasurer,
Board of Education,
Kent, Ohio.

of itself does not disqualify her for teaching,⁵⁶ but in others the courts have supported rules prohibiting marriage. However, a teacher cannot promise in her contract that she will not marry and then do so. In Indiana, a teacher applying for a position told the trustee she was not married, and did not expect to be married during the year. She signed a contract to teach even though she had already been married four days, and in December when the trustee learned of it, he dismissed her. The court held the contract void because it was secured through fraud and misrepresentation.⁵⁷

Necessity of Notice

In some states the statutes give a board the power to dismiss a teacher without giving him any notice of the charges against him, or any trial thereon.⁵⁸ The statutes of most states, however, provide that a teacher shall not be discharged for cause before the end of the term, without the preferment of charges against him, due notice, and an opportunity to be heard.⁵⁹

⁵³Richards v. Dist. Sch. Bd., 78 Or. 621, 153 Pac. 482.
⁵⁴Guilford School Tp. v. Roberts, 28 Ind. App. 355, 62 N.E. 711.
⁵⁵Peop. v. Bd. of Ed., 114 N. Y. App. Div. 1, 80 N.E. 1116.
⁵⁶Peop. ex rel Gorletz v. Bd. of Ed., 52 N. Y. Sup. Ct. 520.
⁵⁷U. S. v. Hoover, 31 App. Cas. (D. C.) 311.
⁵⁸Benson v. Dist. Tp. of Silver Lake, 100 Iowa 328, 69 N.W. 419.
⁵⁹Curtwright v. Ind. Sch. Dist. 47 N. D. 297, 182 N.W. 307.
Trustees of State Normal v. Cooper, 150 Pa. St. 78, 24 Atl. 348.

A ROMANCE IN SCHOOL ADMINISTRATIVE SETTING

The American people, as a whole, are sincerely devoted to the cause of popular education. That devotion finds eloquent expression not only in picturesque educational leadership, but sometimes with exceptional fidelity and charm in the more humble byways of life.

Such a story may be told of a man in Ohio, who has made a remarkable contribution to the educational progress of his community. A highly cultured gentleman? No! A brilliant educator? Again, no! But an unassuming, quiet, efficient man rises to the unusual and superlative. And yet he is no more than the clerk and treasurer of a school board.

Mr. F. W. Bowers came to Kent, Ohio, in 1901 as a master painter in the Erie railroad shops. Somehow a year later, when the citizens looked about for candidates for the school board, the modest painter was chosen and elected. He held his job in the shops and at the same time he served as school clerk.

There may be nothing spectacular in all this. But Bowers applied himself to his duties with a thoughtfulness, a sincerity, and comprehension to his task that was effectively reflected in the progress of the local school system, which during his period of service from small beginnings to a serviceable institution. His slogan through all the years was "we must strive for better things!"

After serving the railroad for forty years he was retired, owing to a mishap which befell him and which deprived him of the use of his lower limbs. Moving about in a wheelchair he is as active in behalf of the schools as he was 29 years ago. The schools still enjoy the benefit of his wisdom, his counsel, and his enthusiasm. The privilege of an education denied him in his younger days must come to the youth of today.

Appreciative of the remarkable service rendered, the school board of Kent has named the new athletic field the Bowers Field. The community has awakened to the fact that it cannot adequately repay the splendid contribution made to the progress of the community by one of its humble citizens.

The example set by F. W. Bowers is in itself a splendid exemplification of useful American citizenship which the modern youth may well emulate. Such a career is an inspiration and an achievement.

³⁹Butcher v. Charles et al., 95 Tenn. 532, 32 S.W. 631.

⁴⁰Wallace v. School Dist. No. 27 Saline Co., 50 Nebr. 171, 69 N.W. 772.

⁴¹Tripp v. School Dist., No. 3, Town of Utica, 50 Wis. 651, 7 N.W. 840.

⁴²Thompson et al v. Gibbs, 97 Tenn. 489, 37 S.W. 277.

⁴³Goldsmith v. Bd. of Ed. of Sacramento, 63 Calif. App. 141, 225 Pac. 783.

⁴⁴People v. N. Y. Bd. of Ed., 114 N. Y. App. Div. 1, 99 N. Y. S. 737.

⁴⁵Cusack v. N. Y. Bd. of Ed., 174 N. Y. 136, 66 N.E. 677.

⁴⁶New Castle Co. Sch. No. 7 v. Walker, 2 Houst. (Del.) 21.

⁴⁷Morley v. Power, 10 Lea (Tenn.) 219.

⁴⁸School Dist. of Ft. Smith v. Maury, 53 Ark. 471, 14 S.W. 669.

⁴⁹Trustees of State Normal School v. Cooper, 150 Pa. St. 78, 24 Atl. 348.

⁵⁰Tingley et al v. Vaughn, 17 Ill. App. 347.

⁵¹Freeman v. Town of Bourne, 170 Mass. 289, 49 N.E. 435.

⁵²Chaddock v. Briggs, 13 Mass. 248-254.

Promotion, Tenure, and Dismissal of Janitor-Engineers

Harry S. Ganders, Syracuse University, and Charles E. Reeves, Elmira College

(Continued from February)

Promotions of Janitors

Usually there is little opportunity for promotions in school janitorial-engineering service. There may be increases in salaries, but these are often not accompanied by increases in rank, authority, and responsibility.

Every school system should have some plan for the promotion of janitors. This does not mean that the higher positions should be closed to outsiders who may be better qualified than those already in the service. It does not mean that employees will be promoted regardless of qualifications for advanced positions. It simply means that through efficient work and the meeting of requirements for advanced positions, every employee should have the possibility and encouragement to progress to higher positions, with higher rank, greater authority and responsibility, and greater reward.

The following is an example of the wrong method of filling head janitorial-engineering positions that came under the observation of the writers recently:

M... is a city of about 30,000 population. It has a number of elementary and junior high schools and one senior high school. The Washington elementary school had on its janitorial-engineering staff a head janitor-engineer, a fireman, and four assistant janitors, three of the latter being women. The head janitor-engineer died. Neither the fireman nor the male assistant of the building were qualified by education or ability to assume responsibility for the position of head janitor-engineer, though both were of average efficiency as workmen. An intelligent man, without experience or knowledge of school janitorial-engineering service, was appointed as head janitor-engineer. He quickly learned from his assistants the "minimum essentials" necessary in caring for a school building. There was no resentment on the part of his assistants, as might have been the case, and the building continued to be fairly well managed.

The effects throughout the system were not so good, however. Many experienced and well-qualified assistants in other buildings resented the appointment of an outsider to a position which they were qualified to fill. Their thought was, "What is the use of giving our best efforts to work which has no future for use? Why should a 'green hand' be placed in a position ahead of us? Let him learn as we have done."

By such practice of disregarding the possibilities for rewarding good employees by promotions, the morale of the force is bound to be lowered and incentives diminished. There can be no objection to the recognition of real merit by rapid promotion, and there should be none to placing an experienced entrant in a position as head janitor-engineer, even though his experience may have been secured in another city. Merit must be the sole criterion. In the case cited, a man wholly ignorant of the work was placed in charge of experienced assistants and in a position of higher rank than that held by qualified assistants in other schools. It was a fact that possibilities for promotion from within the system were ignored that was detrimental to the morale of the service as a whole.

Merit in making promotions will eliminate considerations arising from personal liking, lodge and church affiliation, or any other kind of "pull." Promotion upon merit will necessitate the use of rating devices, an adequate system of records and reports, examinations and special training in determining which employees have merit and are worthy of promotion. An employee's weaknesses should usually be pointed out to him so that he will have an opportunity

to correct his deficiencies and be in line for future promotions.

Seniority, as such, should not be a basis for promotion. With present inadequate systems for training janitor-engineers, however, there is likely to be a close relationship between merit and experience for a number of years after appointment. For this reason, though salaries may be based upon merit, they are likely to correlate positively with years of experience.

According to reports received by Garber, merit is the chief basis for making promotions in the janitorial-engineering service. He found that promotions were made in 667 cities on "merit," in 30 according to length of service, and in 279 upon both merit and length of service. It was found that, where merit was used as the basis for promotions, recommendations for promotion were made by the following school officials:¹

By the board of education or a committee of the board	101
By the superintendent of schools	397
By the business manager or secretary of the board	22
By the superintendent of buildings, supervisor of janitors, chief engineer, or head janitor	67
By building principals	15

In more than half of the cities reporting, recommendations for promotion were made by the superintendent of schools. Personal judgments of superintendents of small school systems may have some value because of more intimate contacts with the work. Personal judgments of superintendents in large cities can have practically no value. In any school system, large or small, adequate records, reports, ratings, and examinations should be the principal basis for making recommendations for promotion. The writers' experience in attempting to secure janitorial-engineering record and report forms from city school officials in charge of janitorial-engineering service, leads to the conclusion that in most cities promotion on "merit," if originating with the superintendent of schools, must exist in name only.

Recommendations for promotion ought to originate with the official who is directly responsible for the operation and care of buildings and equipment, the superintendent of buildings and grounds, or some member of his staff. Recommendations for promotion should then go to the board of education, through the superintendent of schools, just as was shown to be the best procedure for original appointments and for dismissals.

Periods of Employment

There seems to be a tendency to employ janitor-engineers on a 12-months' basis. Deffenbaugh (1915) found that 71½ per cent of 1,338 cities reporting to the U. S. Office of Education, employed their janitor-engineers for 12 months per year. In Garber's study (1922) it was found that 75 per cent of 1,051 cities reporting, employed janitor-engineers on the 12-months' basis, and that 10 per cent employed some for 12 months and some for the school term, only.

Contracts

About one fifth of the janitors reporting from the Rocky Mountain Region, exclusive of Denver, held written contracts. Four fifths of the number reporting held their positions on oral agreements with employing authorities. No written contracts were made with janitor-engineers of the Denver schools. Where contracts were written, the length of employment, under the contract, varied from "month to month" to

"3 years." Two thirds of those holding contracts held 12-months' contracts.

There are usually no written contracts where appointments are made under civil service regulations, the rules of the local civil service commission, prevailing. Many such janitor-engineers are on permanent tenure. Where employees are selected by school authorities, most school systems do not use written contracts. One of the disadvantages of the use of written contracts is that it increases the difficulty of dismissal of incompetent employees.

Tenure of Janitor-Engineers

What should be the tenure of janitor-engineers? An analysis of the statements made in 63 sets of rules and regulations of boards of education, may throw light upon present practices.

Indefinite. Janitors hold positions at the pleasure of the board of education	23
Employed on a yearly basis, with reelections	27
Employed for 3 years	2
Permanent after period of probation	4
Employed on monthly basis	5
Employed on weekly basis	2

The greatest objection to employment of janitor-engineers by the week, or month, or even by the year, is that they may be kept in a continual state of worry whether they are to be retained. The greatest disadvantage in permanent tenure is that where permanent tenure laws prevail, it is extremely difficult to dismiss incompetent employees. The same disadvantage also occurs where written contracts for a period of years are used. Indefinite tenure, under an oral agreement, with the right of termination by either party to the agreement, upon previous notice, would seem to be the best plan. This would mean that an inefficient employee could be discharged by the board of education without resort to a process of law and that an employee could leave at any time by giving the required notice. It would mean that there would be no monthly or yearly reelection of employees by the board of education, but employees would continue in their occupations until notified that their services were not needed.

"After janitor-engineers have been trained through apprenticeship or by other means, and have, by trial, proved to be satisfactory, they should be given indefinite or permanent tenure until it becomes necessary to discharge them for inefficiency, immorality, insubordination, or other sufficient cause."

The Dismissal of Janitorial Employees

In considering the matter of dismissal of janitor-engineers, two questions arise. For what shall they be dismissed? Who shall have the authority to dismiss them?

Where civil service rules prevail, it is usually next to impossible for school authorities to dismiss employees of the janitorial-engineering force. There is usually some provision that they may be dismissed for "immorality, insubordination, neglect of duty" or similar disqualification, but boards of education are required to present evidence before the civil service commission or before a court of law. Unless there is a gross offense, few boards of education are willing to undergo the attendant publicity. The consequence is that unqualified janitor-engineers are likely to retain their positions.

Action for dismissal should be taken upon recommendation of the superintendent of buildings and grounds or other official in direct

²Engelhardt, N. L., Reeves, C. E., and Womrath, G. F., *Standards for Public-School Janitorial-Engineering Service*, p. 12. (Concluded on Page 144)

¹Garber, J. A., *The School Janitor*, p. 15.

The Superintendent's Greatest Opportunity

J. B. Edmonson, Dean, School of Education, University of Michigan

In the selection of his teachers, a superintendent has his greatest opportunity to increase the efficiency of classroom instruction. The standards of classroom work are almost certain to vary from year to year in a school where the superintendent follows the indefensible practice of engaging teachers without making a most careful inquiry into their training, experience, previous success, and professional zeal. In such a school pupils are likely to have a full year wasted, or worse than wasted, because of the blunders made by the superintendent in his choice of new teachers.

There is no doubt that a capable superintendent could raise the quality of instruction in any school employing twenty teachers if the board of education granted him the following powers: first, unqualified authority to nominate all members of the teaching staff; second, freedom to use at least ten days and to spend \$300 for traveling expenses in actual search for promising teachers; and third, authority to offer a competent teacher from \$50 to \$100 more in annual salary than is paid in schools of comparable standing. Many school executives would certainly agree that they could increase the efficiency of instruction in their own schools if they could do these three things. In view of this agreement, why do not more superintendents devote the needed time to finding the best type of teachers?

The suggestion that the efficiency of classroom instruction can be greatly increased through the careful selection of teachers is not a new one: much has been written on the subject. But my former work as inspector of high schools has convinced me that continued emphasis on the suggestion is very much needed. In filling vacancies many employing authorities still trust to hearsay evidence and statements furnished by the applicants to the neglect of the services offered by the appointment bureaus of teacher-training institutions. I would not have anyone conclude that these appointment bureaus can relieve a superintendent of his responsibility. They can, however, give him valuable information with regard to candidates and their qualifications. There is still too little hunting and searching for high-grade teachers. There is still too little use by superintendents of the organized services available for directing their search. Let me repeat that there is no more important service which a superintendent can render to his school than the selection of the right sort of teachers.

May I suggest to any superintendent who needs more time and money for finding the right kind of teachers, that he present the problem to his board of education and seek to convince his board that in the selection of his teachers the superintendent has his greatest opportunity to render service to his school.

The Organization of the Administrative Personnel for Improving Instruction

Joseph F. Noonan

In the proper discharge of administrative duties and responsibilities, the school executive is constantly confronted with the problem of increasing the quantity and improving the quality of instruction. This subject lends itself readily to analysis from two standpoints: first, the business side which is concerned with the materials that are of necessity utilized; second, the educational side, which deals with the techniques and outcomes of teaching.

The whole scheme of instructional endeavor is inextricably interwoven with the interpretation of educational theory, the nature and purpose of pupil achievement, and the efficacy and continuity of the teaching process. To strike a proper balance between the mechanistic tendencies which characterize business practice and the complacent self-satisfaction which denotes the philosophical classroom theorist is the primary function of a supervisory staff. The administrator, with a full and complete understanding of human nature, who is able to administer the work of supervision with these objectives in mind, will save himself considerable worry and ultimately secure the most satisfactory results.

The Grind of Business

There is a drab colorless routine side to every living business. The work of public instruction is no exception to the rule, and the automatizing of the habits that must be practiced by teachers in all situations present a most annoying problem for the administrator. Nearly all of us pride ourselves on being businesslike. Few of us are even good technicians.

Instruction can never be effective from the standpoint of the business world until the essential elements of sound business practice are incorporated in teaching procedures. These are properly the saving of time, the conservation of materials, the elimination of waste, the saving

of energy, and the orderly conduct of the business details which make mechanical smoothness and ease of operation. The educator must be brought face to face with the basic truth that there are some common ordinary acts which must be performed and that philosophy will not provide the *modus operandi*.

It may be suggested that a specialized technician in charge of mechanistic practices will solve this difficulty of recognizing the business side in education.

Attitude Toward Supervision

Many school heads regard the matter of supervision very lightly. Others ascribe to it an exaggerated importance. Some look upon it as the peculiar prerogative of the head of the school system, who lays down general principles of practice. Others, through conferences, study, and experimentation, prescribe a veritable multiplicity of specific things to do, with a systematic check-up on lists of abilities, as a means of controlling the learning situations that result from the pursuit of curricular objectives. Some form of supervision exists everywhere.

The general tendency seems to be in the direction of delegating instructional supervision to experts who are trained in particular fundamental fields. Here the narrow limits of specialization are analytically defined in terms of predetermined educational outcomes with resultant antagonisms on the part of teachers toward supervision. A breach arises between the supervisory staff and the teacher, and cordial cooperative sympathetic relationships are irreparably strained and aborted. In fact, the lack of coordination between the efforts of supervisors and teachers has prevailed so generally that the terminology of the supervisory staff has been subjected to all kinds of subtle change. Supervisors are therefore, variously known as directors, special teachers, visiting teachers, helping

teachers, critic teachers, and consulting teachers. It is true that each term thus employed has its own specific connotation, but the difficulties of supervision have been responsible for its limitation or extension.

Types of Administration

A supervisory staff may be organized in two ways. In the first place the work of supervision may be conducted through the administrative organization of the work to be done. This might result in a supervisor of primary education, a supervisor of elementary education, and a supervisor of secondary education. Such practice finds acceptance in any parts of the United States. The special teachers or subject directors are under the tutelage of such supervisors who give to the system its philosophy of education, the kind of educational integration which unifies the work, and the general principles which serve as grade lines for all types of activity. The subject-matter specialists deal in such a scheme with teaching procedures and pupil reactions. The superintendent deals with the supervisor and the supervisor with the classroom teacher. In small systems, the supervisors deal directly with the classroom teachers in all subjects except art, music, and certain other subjects which demand specialized supervision.

The second type of organization is strictly upon the basis of subject matter. An administrative experiment along these lines was conducted for several years by the state department of public instruction with much favorable comment throughout the state. The establishment of subject directors at Harrisburg was regarded an advanced step in the organization of supervisory personnel, the name "subject directors" was happily chosen, and instruction at least became a living changing thing during the continuance of the policy.

Many city school systems adopted the plan. In a few instances, administrative difficulties arose because of the added expense of supervision, and the plan failed to function adequately. The increase in the number of members of the supervisory staff elicited much criticism, and the contention of oversupervision was seriously advanced by protagonists of the old order. The result was the discontinuance of the plan in such instances. In other cities the plan is still operative and is regarded a proper solution of the problem.

There seems to be some need for a system of supervision which will take into account the administrative subdivisions enumerated, as well as the various types of subject matter. The working out of such a plan is of concern to all of us. The proponents of the "activity scheme" advocated by educational leaders in tune with what is called the new philosophy, object, of course, to any form of supervision which takes cognizance of subject matter as the basis of instruction. A research study of practices in the state along this line has potential value that may be considered by some agency competent to perform such service.

Unified Administration and Supervision

Where the school executive is responsible both for the business and educational sides of a system of instruction, the complete coordination of the aims and purposes of instruction and the materials of instruction is readily effected. The overemphasis of business details, with economies perfected at the expense of efficient instructional materials, is hardly a desirable condition. This is true because of the undue importance attached to the mechanistic side of instruction, with its consequent adverse influence on the initiative and originality of the supervisory staff. Such a conclusion is not always true, but tends generally to be true. The City of Philadelphia, for example has worked out in a splendid way a dual system of administrative

(Concluded on Page 146)

Sixty-Five and Growing Vigorously

Great Numbers and Variety of Program Distinguish Superintendents' Gathering

If vast numbers of important educators and an amazing variety and richness of program spell greatness in an educational convention, then the recent meeting of the Department of Superintendence in Atlantic City, February 22 to 25, may be described as the most successful in the annals of the Department and of the National Education Association. It would be difficult to find any one feature of the convention which could be spoken of as outstanding or startling; perhaps the best which can be said of the speakers and addresses is that they were uniformly good and without a single disappointment. Distinctly new viewpoints, there were none; even academic distinctions could not be drawn, because there was no opportunity for debate. The newest thought and the only departures from conventional theory and conformist viewpoints of practice were heard in the minor groups. Atlantic City provided nearly ideal convention conditions in the way of ample first-class hotels, the "greatest convention hall in the world," and superb weather. Bruce's Attendance Bulletin listed more than 9,000 educators who registered, and the presence of commercial men and of teachers from the surrounding cities easily raised the total over 13,000.

The President

President Frank Cody, of Detroit, has been well described as a robust, upstanding specimen of humanity who perpetually radiates good cheer, friendliness, and good will. If he seems to have no time for official dignity, he wins absolute respect by fearlessness, tact, fair-mindedness, and intellectual force. He is the finest type of city school superintendent — progressive in all his thinking, insistent upon facts and research as the basis for new school policies, strong in personal leadership, and in every way a large man of affairs. In building up the Atlantic City convention, he showed clearly that he is keenly alive to the present philosophy of American education and to all the strong cross currents of growth and interference with educational movements. His topic, "Education in the Spirit of Life," was a genuine departure, and even though many of the speakers sensed the meaning of life only in the more narrow social and civic sense and overlooked entirely the spiritual and the deeper cultural meanings of personal life, he struck a new note in program making.

Only very few speakers departed from a rather conventional type of criticism of current theory and practice. American education partakes of the spirit of American business which is keenly sensitive to anything which may disturb prosperity and the *status quo*.

The Meetings

A single report of the convention can touch only superficially on the general sessions and a very minor portion of the group and special meetings. In Atlantic City there were never less than four meetings on any morning and quite as many as twelve meetings in any afternoon. Some of the closely related group sessions were separated by 3 miles, and no one man could hope to cover more than one of two meetings each morning and two or at the most three meetings each afternoon and evening. In only very few of the sessions was the set program brief enough to permit of discussion. The very size and number of the meetings were such that exchanges of opinion and salutary debate of viewpoints were impossible. Perhaps in the far future the Department may seem justified in getting away from numbers and come back to smaller groups which can really discuss theory and practice.

The First General Session

The session on Monday morning had for its topic "Friendliness in School Relations." President Cody in his presidential address discussed seven characteristics of life which he declared education must embody. It cannot be said that Mr. Cody expressed any new ideas or startling theories on education.

"Surely," he concluded, "the teacher of today stands in a very responsible position, for, in the next analysis, our education rests on the classroom teacher. Buildings, equipment, organization are but bulwarks to strengthen him. The seven outlooks of life that I have mentioned are the outlooks of the real teacher. If he



MR. NORMAN R. CROZIER,
Superintendent of Schools, Dallas, Texas.
Newly Elected President of the Department of
Superintendence of the N. E. A.

is progressive, practical, dynamic, recreative, friendly, cooperative, and idealistic, our schools will be likewise, and we may more nearly reach the ideal of the Great Teacher who came that we might have light and have it more abundantly."

Mrs. Edith B. Joynes, president of the Classroom Teachers of the National Education Association, argued for greater friendship between teachers and pupils. The teacher must love children and teach them rather than subjects. She must be happy and friendly, and the contagion of her cheerfulness must be imparted to the children so that they may have habits of success, an optimistic outlook on life, patience, sympathy, and good humor.

Mrs. Susan M. Dorsey presented six basic supervisory policies which are essential for friendliness between teachers and the superintendent. The superintendent, she said, must be sincere in helping teachers develop, constructive in improving teaching methods, must be helpful to teachers in improving themselves in scholarship, must raise the morale by bettering the salaries and pensions of teachers, must acknowledge publicly the accomplishments of teachers, and must arouse on the part of the teachers themselves a friendliness for the superintendent.

Father J. Elliot Ross, Catholic Professor and Associate Administrative Director of the School of Religion of the University of Iowa, proved to be rather an innovation in the program of the Department. In part he said:

The mere fact of your asking a Catholic priest to speak on the subject of Friendly Relations between Public and Parochial Schools, is in itself a bright omen. I am sure, therefore, that no offense will be taken if my suggestions are frank and definite. Because I am speaking to the superintendents of public schools, I confine myself to what you can do to bring about friendlier relations.

First, try to make plain that the public schools are really public, in the sense of belonging to the whole public — Catholic, Protestant, Jewish, and unchurched. An implication from this, is that properly qualified Catholics have the same right to teach in the public schools that anyone else has. And I suggest that in order to show there is no discrimination against them on the ground of their religion all questions of religious affiliation be omitted from your application blanks.

And since the public schools also belong to Catholics, I think you should welcome Catholic children who are attending parochial schools, to make use of the public schools for manual training or domestic science, or whatever else they wish to take.

Second, it is to the advantage of the State to have healthy Catholic children, just as well as healthy Protestant children. Consequently, when health service is provided for the public schools, it might reasonably be extended to the Catholic schools. This is not an appropriation of money for sectarian purposes.

Third, get into personal touch with the priest or priests in charge of parochial schools. If you have a mutual friend who will invite you both to dinner, that is a fine way of becoming acquainted. For a man who is relaxing in an easy-chair smoking, after a good meal, may see things very differently from what would have been his outlook at 11 in the morning or 4 in the afternoon.

The meeting was closed with a vigorous discussion of publicity as a means of developing friendly community relations for the schools, by Mr. Paul C. Stetson, superintendent of schools, Dayton, Ohio. "No school system is too small nor is any system too large," he said, "to have a department of public relations which shall have for its primary function the supplying of reliable, unbiased, impersonal, and factual information about the schools."

The Monday Afternoon Sessions

The Department broke up into ten groups on Monday afternoon, scattered among the large hotels along the Boardwalk. Probably the largest session was that of superintendents of cities with a population of less than 10,000. Dr. Frank Wright of Washington University, presented to this group a constructive paper arguing for the superintendent's responsibility for classroom procedure. Supt. H. H. Ryan of the University High School, Madison, Wis., argued that ability grouping in the high school must be based on a comprehensive view of scholastic maturity. An accelerated or an enriched program for bright pupils is only defensible if the grouping is such that no extraordinary strain results upon the physical equipment of pupils. There is no incompatibility, he continued, between ability grouping and the principle of individual instruction. Adaptation of work of varying degrees of scholastic aptitude calls for discrimination as to content, method, and approach. Specialization is the solution for teachers and classes.

The group devoted to the interests of assistant and district superintendents more than justified its existence in the interesting program which was presented at the Traymore Hotel. Dr. W. F. Kennedy, of Pittsburgh, presented the value of the demonstration lesson as a means of raising standards of teaching. His address was only one of a number which made clear the special types of work carried on by assistant superintendents engaged in actual supervisory work.

The Monday Night Session

The session Monday evening proved to be a departure. Mrs. Ruth Bryan Owen spoke of modern politics as a factor in national life. Mr. Frank B. Jewett brought to the convention the demands which business is making on education for trained employees. Mr. Jewett's viewpoint was of one who is seeking trained specialists in the engineering, operative, and executive departments of the vast enterprises commonly spoken of as big business.

Dr. William John Cooper closed the meeting with a summary of the vast educational movements which have been initiated since the world war upset existing governmental and social conditions in eastern Europe and Asia. He showed clearly that the educational changes which have taken place are in turn making for vast changes in the political, economic, and social life of more than three quarters of the peoples of the globe.

The Tuesday Sessions

The Department has stuck to the custom of holding an annual review of recent accomplishments in American education. The Tuesday morning session at Atlantic City was devoted to the topic "Education is Practical," and seven outstanding schoolmen reviewed briefly the achievements of American schools as illustrations of the practical character of education. Dr. Charles H. Judd, of Chicago, showed vividly that instruction has made vast improvements since 1905. The curriculum is broader and richer: pupils are cultivating their minds, not merely filling them with information; teachers are doing less and less guesswork; they are more scientific than ever before. The school life of the child has been increased fivefold in length and children cover far more effective work each year. If this progress of the schools is to continue.

(Continued on Page 128)



ISAAC E. YOUNG JUNIOR HIGH SCHOOL, NEW ROCHELLE, NEW YORK
Starrett and Van Vleck, Architects, New York City

ISAAC E. YOUNG JUNIOR HIGH SCHOOL, NEW ROCHELLE, NEW YORK

Starrett and Van Vleck, Architects

The Isaac E. Young Junior High School at New Rochelle, N. Y., completed in 1929, is a good solution in plan and elevation of a modern school building on a difficult site.

The plan finally selected follows the contours of the site with the two gymnasiums located on the Centre Avenue side of the plot, and the main axis of the tower and auditorium placed directly in line with the Pelham Road as one approaches along the thoroughfare from the west. This portion of the central feature of the plan gives the building a very commanding setting from that point.

Two athletic fields are provided — one for boys directly in front of the building, large enough for a standard football field with a quarter-mile running track encircling it — and a smaller one for girls at a slightly different level directly adjacent to their own gymnasium.

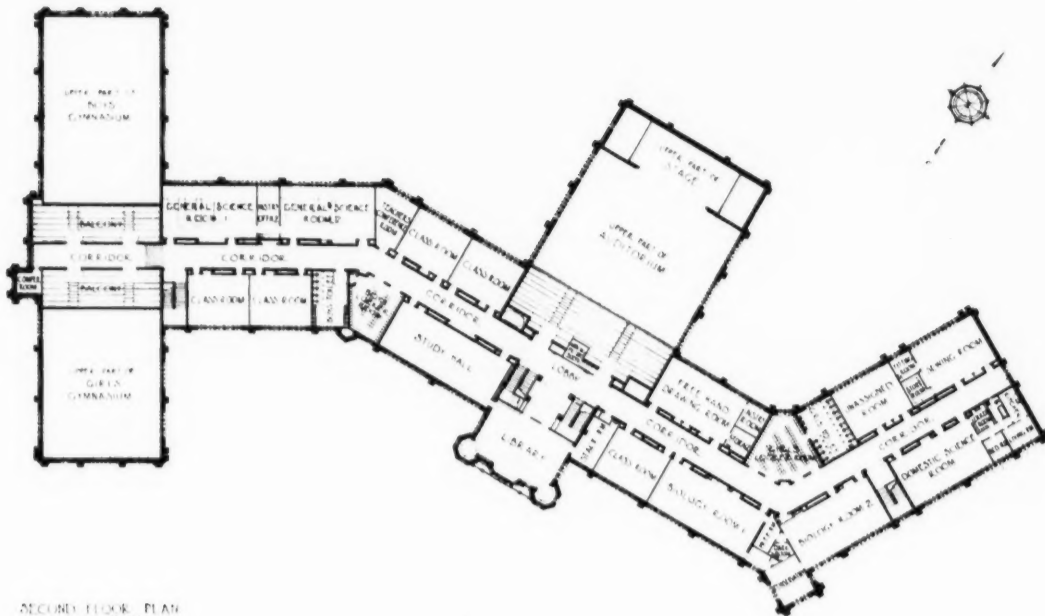
Space has been allocated for a future open-air theater at the easterly end of the plot, where the natural contours of the ground lend themselves readily to the working out of this desirable feature of a high-school plant.

The architectural style used is Collegiate Gothic examples of this style being found at Oxford and Cambridge. This particular style was decided upon primarily because of the varying contours of the site. On rolling ground this type of architecture can be so interpreted and massed as to become almost an integral part of the landscape and at the same time avoid extensive grading.

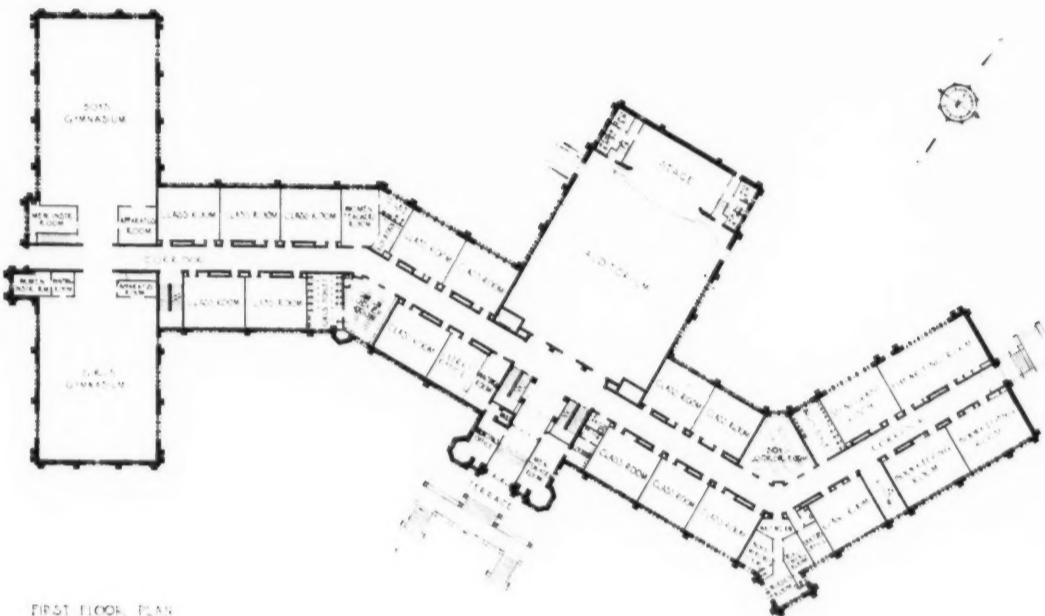
Inasmuch as the selected style is both informal and flexible, the architects took the opportunity offered by the problems and have given architectural expression to the various units of the plan. For example, the large turreted tower dominates the mass and is the keynote of the composition; the smaller gymnasium tower dominates that group; and the corner tower with the large window area indicates that much sunlight is desired at this spot, for it is here that the conservatory is located.



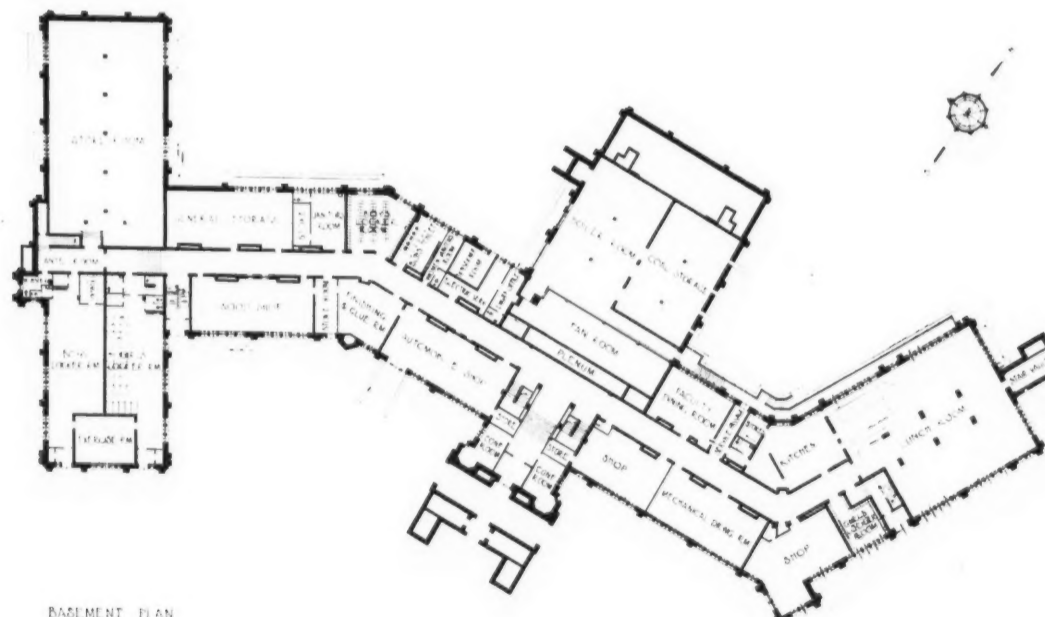
ENTRANCE DETAILS, ISAAC E. YOUNG JUNIOR HIGH SCHOOL, NEW ROCHELLE, NEW YORK
Starrett and Van Vleck, Architects, New York City



SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

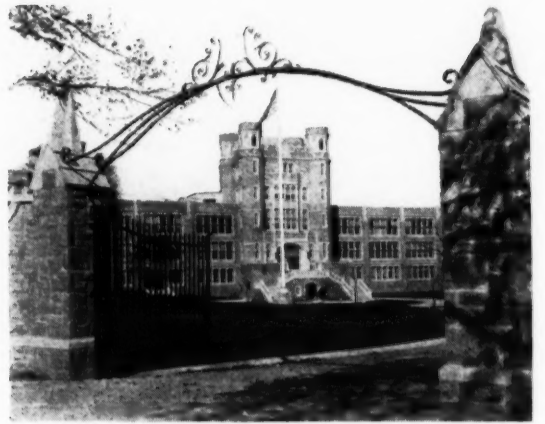


BASEMENT PLAN
SCALE: 1/8" = 1'-0"

ISAAC E. YOUNG JUNIOR HIGH SCHOOL, NEW ROCHELLE, NEW YORK
Starrett and Van Vleck, Architects, New York City

The material used in the elevations of the building is rock-faced gneiss from Yonkers and composition limestone. The ornamented spots are stylistic and yet expressive of the locality, of the use of the buildings as a whole, and of its various units. For example, the football player and athletic girl corbels are used in the gymnasium entrance.

The building is planned to accommodate 900 pupils at present with a future extension at the east, increasing this number to 1,080. The auditorium seating 1,044 is located in a centralized position, directly accessible from an automobile entrance through a porte-cochere at the driveway level and also from the field through exterior staircases directly under this.



ISAAC E. YOUNG JUNIOR HIGH SCHOOL,
NEW ROCHELLE, NEW YORK

Two gymnasiums have been provided, located on the Centre Avenue side of the building, with locker and shower rooms below. These are arranged to be readily cut off from the main building so that they can be used by various organizations in the evenings without opening up the entire building.

The library is located in the main tower on the second floor with the music room directly above it on the third. The study hall is directly adjacent to the library. The administration rooms are directly below the library in a centralized position on the first floor.

The plan, as developed to follow the natural contours of the ground, changes directions several times, and these corners were utilized for toilets and alcove locker rooms.

The lower or ground floor, with full light only on the side toward the field, contains several large shops for woodworking, machine work and automotive work, mechanical drawing, etc., together with a cafeteria at the easterly end.

There are 20 regular classrooms, 2 rooms for general science, 2 for biology, 4 special rooms in the business department, 2 in the household-arts department. The building is of fireproof construction throughout, with reinforced concrete floors and roof and structural terra-cotta partitions.

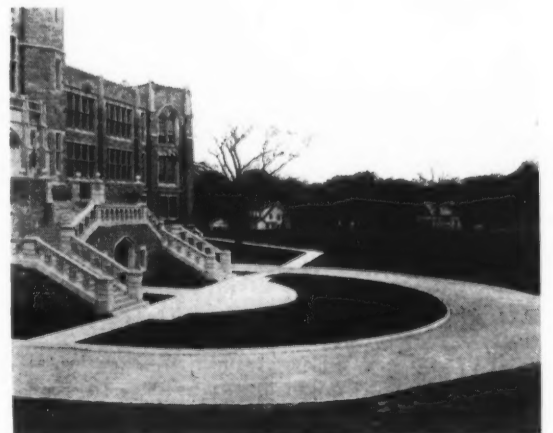
The floors are of maple generally. Corridor floors are of cement covered with linoleum; toilet floors are of terrazzo. The floors of the gymnasiums and shops are of blox-on-end.

The woodwork and doors are natural finish ash. Corridors are treated with a salt-glaze brick wainscot 5 ft. high, with smooth plaster above.

Cost Details

Site	\$ 145,000.00
Building	1,011,531.73
Equipment	102,236.37
Painting	8,500.00
Grading	111,004.79
Fence and gates.....	13,654.92

Total Cost.....\$1,391,927.81



ISAAC E. YOUNG JUNIOR HIGH SCHOOL,
NEW ROCHELLE, NEW YORK



WATERLOO HIGH SCHOOL, WATERLOO, NEW YORK
Carl C. Ade, Architect, Rochester, New York

A COMPLETE HIGH-SCHOOL BUILDING

The new high school at Waterloo, N. Y., has been planned to meet the requirements of a community for a complete secondary school. The building is designed in the Colonial style, and in its commanding position facing the Waterloo village park, is one of the architectural show-places of the community.

The building has been so arranged that the auditorium, the kindergarten, the library and the school-board offices form a complete unit accessible from two main streets of the town. This unit can be entirely shut off from the balance of the school and can be used for various community and social-center purposes. The kindergarten and the teachers' room can be used for small group meetings.

The library on the second floor, and the teachers' room, can be used for reading and for small group activities, and the auditorium for various public meetings, theatricals, concerts, etc. The stage, the motion-picture equipment, etc., are of such complete type that every need for a small theater is met.

The central section of the school building proper is three stories high and contains classrooms, a large study hall, recitation rooms, a library, a reference room, and toilets. This section of the building can be used independently of the other two divisions of the building.

The north wing of the building also forms an independent section. It includes a gymnasium, with complete locker and shower rooms, a domestic-science suite, laboratories, a drawing room, and rooms for commercial studies. This wing of the building has been planned so that full advantage is taken of a drop in the grade. Provisions have been made to add from six to

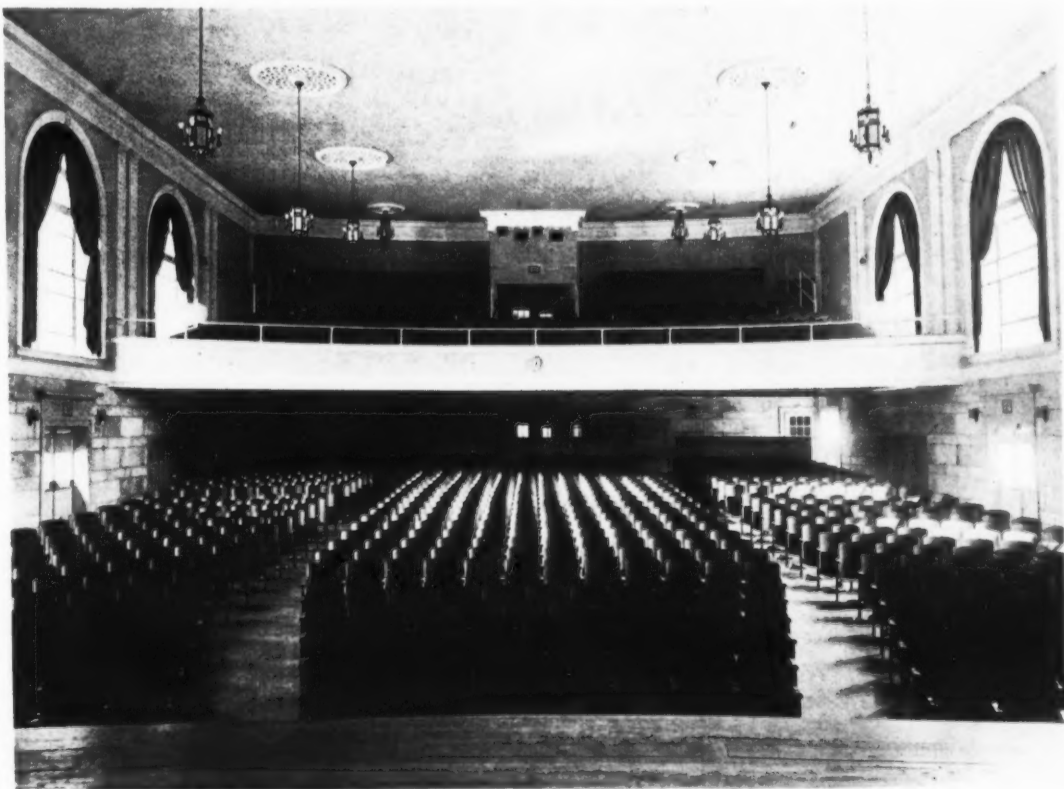
nine classrooms at the rear. The building was planned by Mr. Carl C. Ade, A.I.A., of Rochester, N. Y.

The following are the details of the construction and equipment:

Construction Data	
Date contract awarded.....	May 15, 1928
Date building occupied.....	Sept. 1, 1929

Site	
Dimensions.....	Five acres
Principal frontage.....	East on park

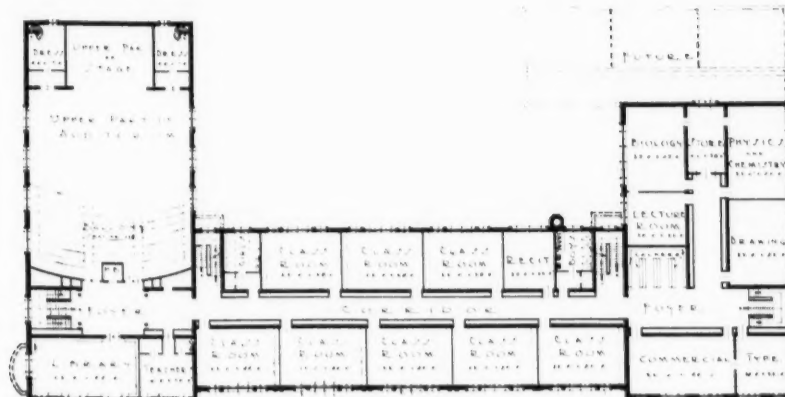
The Building	
Use.....	Junior-senior high school
Number of rooms.....	35
Laboratories	3
Library rooms.....	3



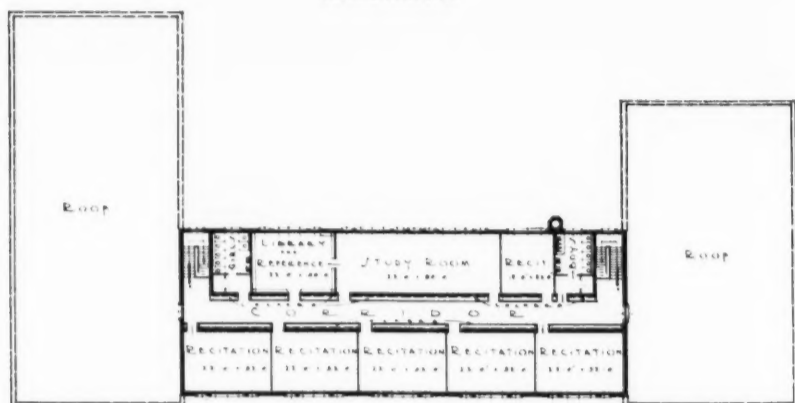
AUDITORIUM, WATERLOO HIGH SCHOOL, WATERLOO, NEW YORK
Carl C. Ade, Architect, Rochester, New York



GYMNASIUM

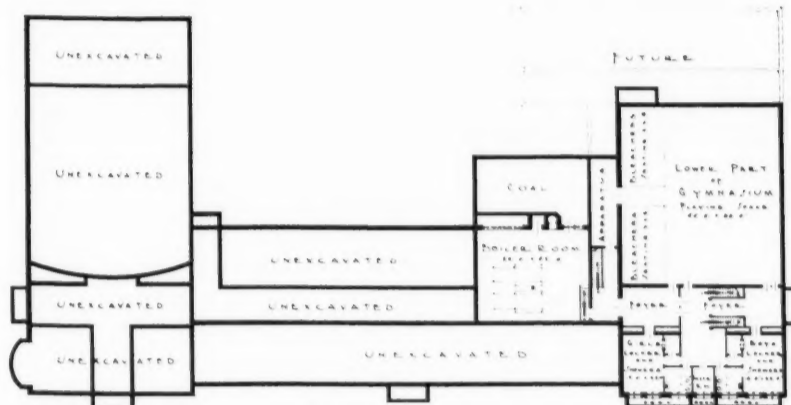


FIRST FLOOR PLAN

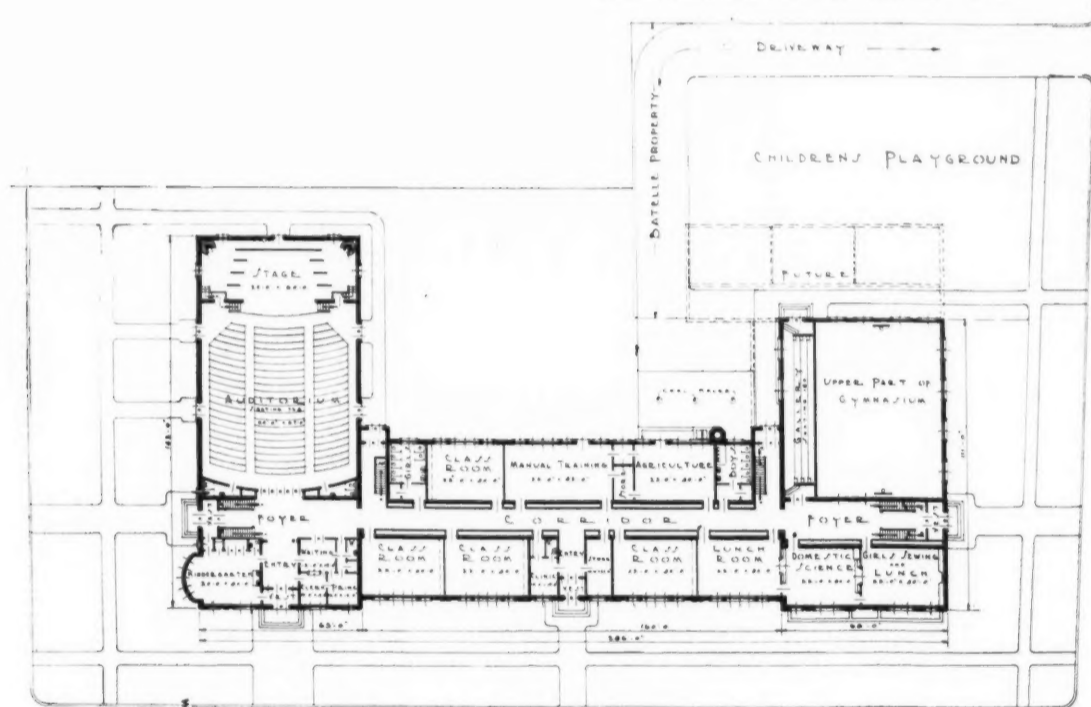


SECOND FLOOR PLAN

WATERLOO HIGH SCHOOL, WATERLOO, NEW YORK
Carl C. Ade, Architect, Rochester, New York



BASEMENT PLAN



GROUND PLAN, WATERLOO HIGH SCHOOL, WATERLOO, NEW YORK

Study rooms.....	1
Commercial art.....	1
Music	1
Offices	3
Book storage.....	3
Nurse	1
Clinic	1
Girls' restroom	1
Teachers' room.....	1
Auditorium	capacity 1,000
Gymnasium	capacity 600

Design and Construction

Exterior design.....	Colonial
Exterior facing.....	Brick and stone
Exterior trim.....	Norristone
Construction material.....	Concrete and steel
Corridor and stair finish.....	Durolithic
Classroom finish.....	Maple floor and oak trim
Gymnasium finish.....	Maple floor
Auditorium finish.....	Cement and linoleum
Finish of toilet rooms.....	Granolithic floor and brick wainscoting

Mechanical Equipment

Type of heating.....	Unit system
Temperature control.....	Automatic
Electrical equipment.....	Complete
Plumbing.....	Modern fixtures

Cost and Pupil Capacity

Pupil capacity of building.....	1,000
Cost of building.....	\$378,000
Cost of equipment.....	\$20,000
Total cost.....	\$398,000
Cost per cubic foot.....	.30 cents
Cost per pupil.....	\$378.21

THE QUAKERTOWN HIGH SCHOOL

The combination junior and senior high school invariably involves problems of planning and construction that are difficult, unless the educational problem has been outlined with extreme care and unless multiple use is possible

for all the so-called special rooms of the building.

In the case of the new Quakertown Junior-Senior High School at Quakertown, Pa., the school authorities and the architects have coöperated by providing a building that is extremely flexible in use, complete for a board program of secondary education, and at the same time economical in plan, size, and use.

The building is planned in the shape of a huge, wide letter U, with classrooms on the sides and in the front. The corridor and stairways immediately inside the tier of classrooms, etc., surround the auditorium and the gymnasium on three sides. The auditorium and gymnasium have ample side light and are separated by a special type of folding partition, which makes it possible to open up both rooms for overflow audiences in either part.

The basement contains only a small space for locker and shower rooms, boiler, and coal rooms, and the storage room.

The first floor contains nine classrooms, a drawing room, offices for the principal and the superintendent of schools, toilets, dressing rooms, and a girls' shower room. The latter is fitted with special shower booths which do not show on the accompanying plan.

On the second floor there is a science suite, two classrooms, a domestic science suite, a large library, and a commercial suite.

The building is constructed of face-brick and stone, with interior nonbearing partitions of cinder block. The framework of the structure is steel; the floors are concrete; the stairs are steel and concrete; the corridors and the gymnasium have glazed-brick walls; the classrooms have plaster walls and ceilings; and the auditorium is finished in plaster and plaster stone. The classrooms have mastic floors and the toilets and dressing rooms have terrazzo floors. The auditorium has a cement floor, and the gymnasium has a yellow-pine finish floor over the concrete slabs.

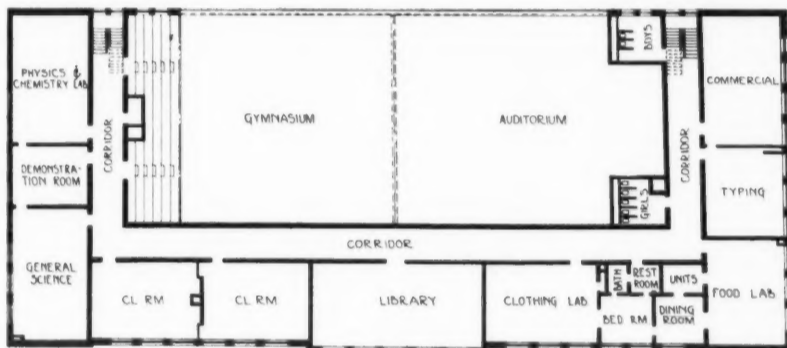
The building is heated by means of a vacuum system, with unit ventilators in all classrooms and unit heaters in the gymnasium. Automatic temperature control is provided.

The building has a normal pupil capacity of 500. It was planned by Mr. C. J. Lappley,

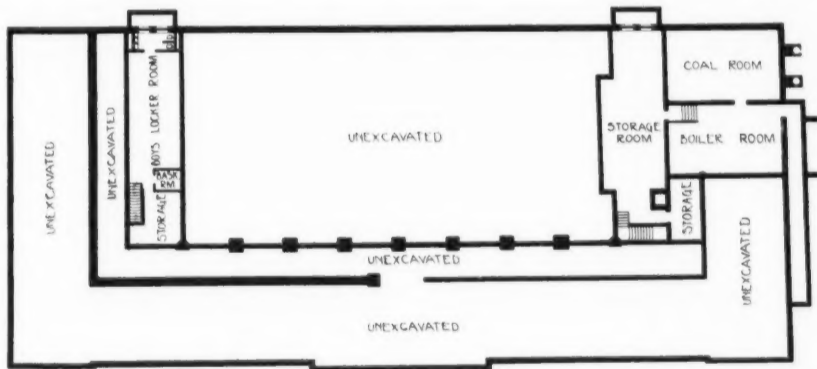
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QUAKERTOWN JUNIOR-SENIOR HIGH SCHOOL, QUAKERTOWN, PENNSYLVANIA
Clayton J. Lappley, Architect, Harrisburg, Pennsylvania



SECOND FLOOR PLAN



BASEMENT PLAN



FIRST FLOOR PLAN

QUAKERTOWN JUNIOR-SENIOR HIGH SCHOOL, QUAKERTOWN, PENNSYLVANIA
Clayton J. Lappley, Architect, Harrisburg, Pennsylvania



ENTRANCE DETAILS



GYMNASIUM AND AUDITORIUM



AVON HEIGHTS CONSOLIDATED SCHOOL, AVON, CONNECTICUT
School Plan Service Bureau, Architects, Middletown, Connecticut

A CONNECTICUT CONSOLIDATED SCHOOL

Lewis S. Mills, Middletown, Connecticut

This new school building, recently completed and dedicated, meets the long-felt wants of the northern end of the town of Avon.

The building is 60 ft. deep by 85 ft. front. The basement is well lighted and contains a small meeting room, a manual-arts room, a large playroom, a furnace room, and a fuel room.

The main floor contains four classrooms, an assembly hall, a principal's office, a supply room, boys' and girls' toilet rooms, and a large central corridor.

All interior walls are plastered over metal lath; the ceilings are Celotex, except in the boiler room, where reinforced concrete slab has been used.

Corridor floors are battleship linoleum, laid over cement. Classroom floors on the main floor are beech. The wood trim is oak and the window sash are of the reversible type.

The complete cost of the building, including the fees and grading, was \$31,000. The plans

were prepared by the School-Plan Service, architects, of Middletown, Conn.

ARCHITECTURAL ADVICE — WHY TAKE IT?

Here are nine good reasons why you ought to seek the services of an architect and be guided throughout by his judgment:

1. The many complications of present-day building programs make the average owner helpless without competent technical advice.

2. An architect of standing is really the only source for absolutely impartial counsel on your complete building program.

3. Expert advice on separate items in the building program may be worthless unless the items are assembled with wise balance of importance. The architect is especially trained in this respect.

4. Is it not logical that a recognized architect, who has devoted a lifetime of study and special training for his work, should know more about the best thing to do in building than the man with other interests and obligations?

5. The authority to use the name "architect" is restricted to those who have proved to the satisfaction of the state that they are thoroughly versed in the theory and practice of building.

6. Architects are held directly responsible to the state for competency and care in the design of the buildings on which they are employed. They are likewise under special obligation to handle with care the taking of bids and all business entrusted to them.

7. In building projects, technical questions constantly arise where the interest of the contractor, who knows, is the opposite of the interest of the owner, who does not know. In such cases the impartial skill of the architect in deciding fairly the technical questions involved is most important.

8. It is unwise for anyone to pay out money for building charges except for architectural advice.

9. Both the owner and the contractor can profit by agreeing to leave the settlement of all matters concerning the contract between them to the judgment of the architect.

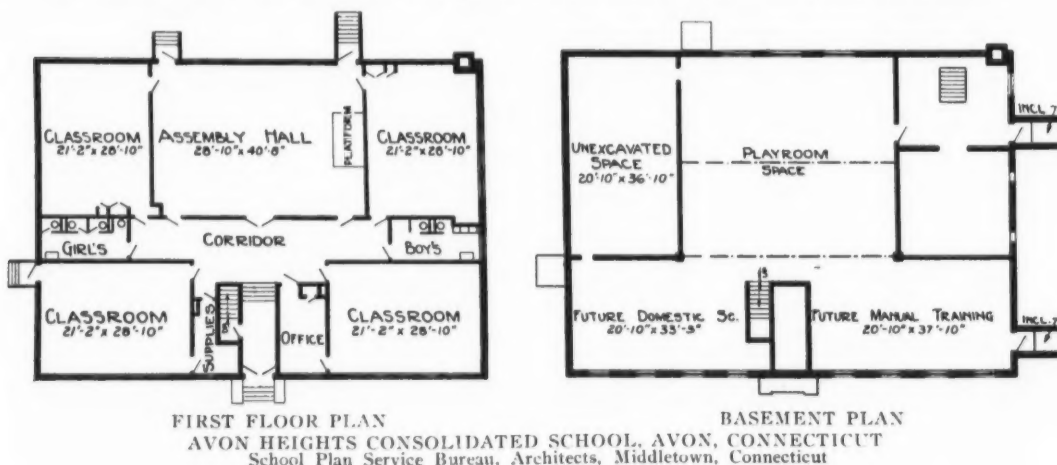
Illinois Society of Architects.

ONE-ROOM SCHOOLS VANISHING IN UNITED STATES

The one-room school characteristic of the early American education system is rapidly disappearing in the United States, according to a recent report of Mr. Timon Covert, of the U. S. Office of Education.

In 1918, when figures were first compiled on schools of this type by the Office of Education, there were approximately 200,000 schools of this type in the country. In 1927-28, the number had been reduced to 153,000. At the present time, it is estimated that there are about 150,000 or less, according to Mr. Covert.

The rise of the one-room school was due to circumstances, it was pointed out in the report. Sparse population in widely scattered areas,





SOUTHWICK CONSOLIDATED SCHOOL, SOUTHWICK, MASSACHUSETTS
Malcolm B. Harding, Architect, Westfield, Massachusetts

SOUTHWICK CONSOLIDATED SCHOOL

C. H. Pratt, Superintendent of Schools

A new modern elementary school has been completed in Southwick, Mass. This school, located in the village at the center of the town, replaces 12 school buildings. Eleven of these were of the rural 1-room type; 1 building had 2 rooms. Teachers had from 2 to 8 grades and from 15 to 40 children as the case might be. The old buildings were located in various parts of the town, where they were established in the early days of the old New England "school district" system.

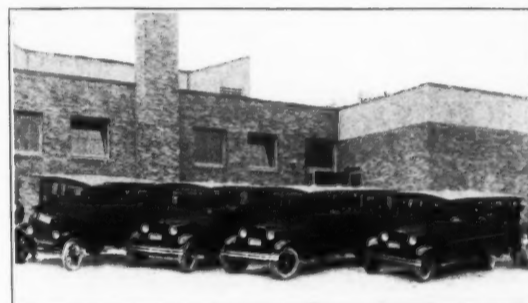
The new school occupies a dignified position at the front of a smooth, well-drained, community playground. It contains 8 regular classrooms, a library room, offices for the principal, an assembly hall with stage and balcony, a teachers' room, a room for the school nurse, book and supply rooms, lunch and playrooms, a kitchen, a boys' washroom, a girls' washroom, and a boiler room.

The classrooms are 22 by 30 ft. Each includes a wardrobe and teacher's closet. The building is heated by low-pressure steam boiler and is ventilated by the so-called direct-indirect system. Hot and cold water is available in the washrooms and in the room used by the nurse.

The assembly hall is 42 by 48 ft. with a stage 14½ by 27 ft. The balcony seats 70 people, while the floor will take 400 chairs. This hall is used for community as well as for school assembly purposes. It is used also for physical education and play purposes. Baskets with backboards are provided for basketball.

The rooms adjoining the kitchen are provided with benches for the noon lunch. These benches are placed against the walls when the rooms are used for play.

The classrooms, the library, and the office form the sides and base of a letter U. The assembly hall, the stage and the wash rooms occupy the space inside the U. The balcony, teachers' room, the room for the nurse, and the bookroom occupy the second story at the front.

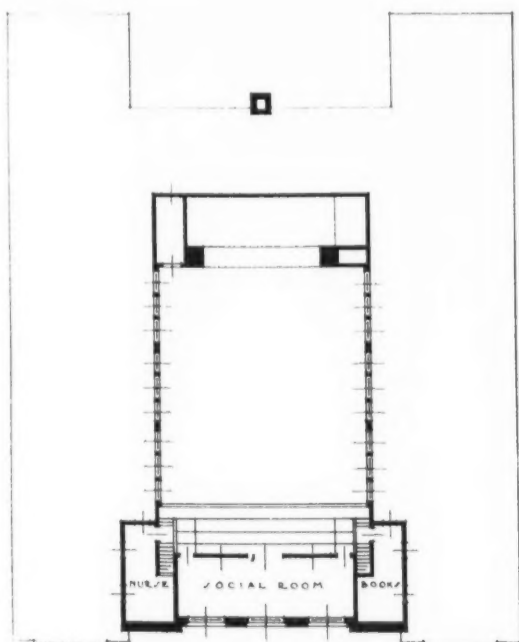


BUSES USED FOR TRANSPORTING PUPILS,
SOUTHWICK CONSOLIDATED SCHOOL,
SOUTHWICK, MASSACHUSETTS

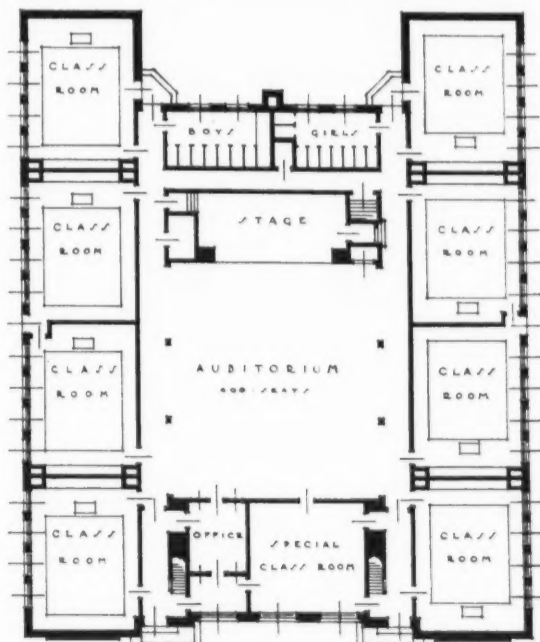
The assembly hall extends the entire distance to the roof.

Two hundred and fifty of the 300 children attending this school are transported in 4 busses owned by the town and operated by the school department. Each bus accommodates 2 loads morning and night. The time required for trans-

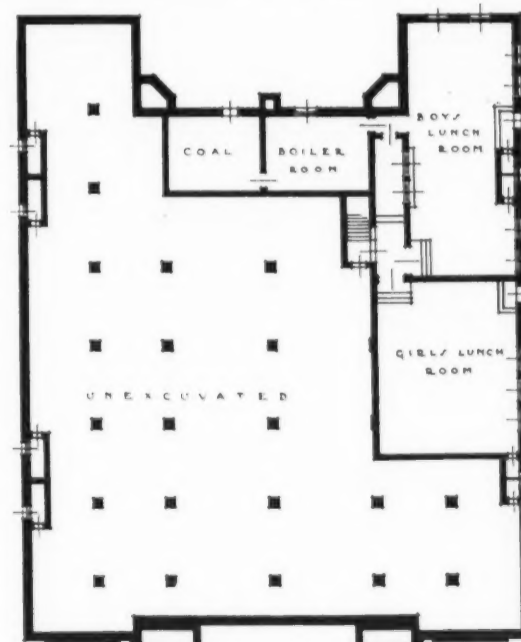
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SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"



BASEMENT FLOOR PLAN
SCALE 1/8" = 1'-0"

SOUTHWICK CONSOLIDATED SCHOOL, SOUTHWICK, MASSACHUSETTS
Malcolm B. Harding, Architect, Westfield, Massachusetts



THE FRANCES WILLARD SCHOOL, RIVER FOREST, ILLINOIS
Perkins, Chatten and Hammond, Architects, Chicago, Illinois

The Problem of Housing Schools Needs, Finance, and Educational Program Worked Out in Brick and Steel

Murray A. Dalman, A.I.A., of the Firm of Perkins, Chatten & Hammond, Chicago

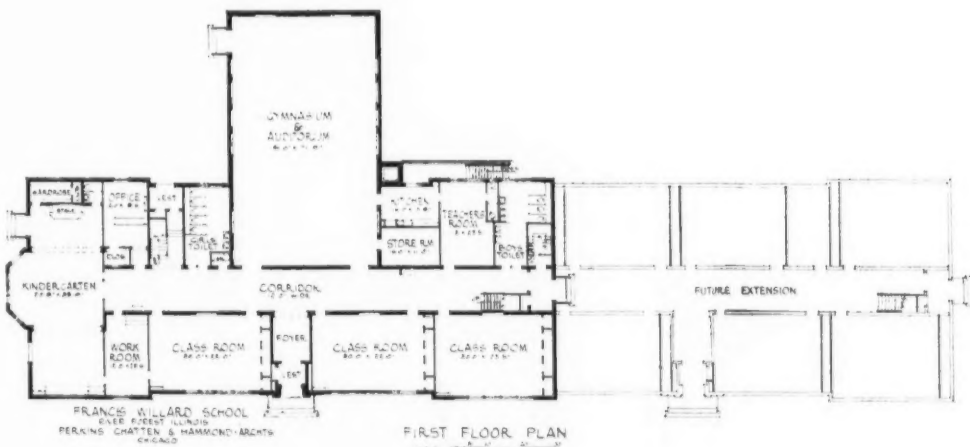
It is not unusual to find two school districts in the same state, governed by the same laws, as near alike as two school districts can be in wealth, population, enrollment and distribution, one of which has adequate and modern school-housing, while the other has inadequate and unsatisfactory housing. The tax rates in the two districts may be equal and the amounts of indebtedness approximately the same.

Then there are many districts with one "show" building, used to one third of its capacity, while the other parts of the district are served by overcrowded, obsolete buildings. This "show" building may prove woefully inadequate when it reaches capacity; for, while provided seemingly with every modern convenience, the relationship of its various parts has not been carefully considered and balanced with the modern educational program. Many school executives have spent their lives trying to make schools fit buildings of this kind.

There are cities, too, whose requirements have been set up and have not been changed materially for years. Certain factors in these plans are very often the pride of the school-board building departments, although they hamper the educational program tremendously. Tradition says they are good, progress says they are bad.

Why Bad Situations Prevail

On every side is heard the cry, "inadequate financial possibilities," but districts with the same economic possibilities have solved their schoolhousing problems. While it is, no doubt, true that in many instances present possibilities will not permit the immediate provision of facilities to suit present needs on account of lack of proper provisions in the past, a carefully developed program will soon begin to clear away the



FRANCES WILLARD SCHOOL, RIVER FOREST, ILLINOIS
Perkins, Chatten and Hammond, Architects, Chicago, Illinois

difficulty, and in a few years the housing program will have caught up with the needs.

There are many other conditions of school-housing in the various districts in the country. The foregoing have been mentioned to set up a representative problem for solution, and discussion in this article.

These conditions have arisen from several causes, and have been brought to present attention for several reasons. Chief among the causes are:

1. The lack of a continuing program.
2. The changing personnel of lay boards of education.
3. The lack of publicity concerning school needs.
4. The lack of a state or national clearinghouse for the discussion of schoolhouse problems.
5. The lack of professional training of executives in the matter of housing.
6. The lack of architects trained and experienced in school planning.
7. The absence of studies of financial possibilities permitted by law.

A Program is Essential

No board of education in a growing or changing community will ever see the day when it should not have a building program. This program will be projected into the future for a period of 10, 15, or 25 years and will be based on projected needs, caused by obsolescence, growth, and development; its rate and final accomplishment will be determined by a careful study of the financial situation. Every board owes to its community the formulating of a carefully considered program which treats the needs in the order of their importance and considers *all* the needs. This is particularly true since the personnel of boards of education is changing continually. Without a continuing program, a year or two is lost before the new members of the board are able to grasp the situation and determine their course. If boards change every four years, as they often do, about one half the time is spent in consideration and is lost to the school construction program.

When a program is laid out, it must be sold to the community through every avenue of publicity. Schools as an item of public administration strike a responsive chord in more homes than any other enterprise. If the community adopts the program and readopts it as each unit is reached, there will be no question of adequate support.

Until very recent years there has not been a great amount of helpful material available to the school-board member or school executive who was interested in solving a housing program. This JOURNAL and others have tried to aid in every way possible by printing plans and suggestions opening their pages to discussions by leaders in the field, and have been influential in bringing the problem of housing its proper emphasis.

Competent Superintendents Now Available

The consideration of the technique of teaching or classroom procedure has left no place in teacher-training institutions for the consideration of building planning. The consideration of the reactions of the child mind to mental stimuli did not concern itself with the building.

This order is gradually changing, and several schools of education through their departments of building research are acting as clearing houses of information and as advisers to schoolmen who have problems to solve. There are available several avenues of consulting service in school planning or "educational engineering." Men are devoting their time to school-building research, not so much to materials, but to arrangement, use, dimensions, and organization. Their job is to make the "building fit the school," and to house the educational program efficiently.

CLEANLINESS IN SCHOOL HOUSEKEEPING

Cleanliness in a school plant denotes care, order, and discipline. In a measure it is indicative of the general tone, momentum, and efficiency of the school as such. In fact, a school plant that has a slovenly appearance frequently reveals a neglect in the care of apparatus and paraphernalia. There is no doubt that brightness, neatness, and above all, cleanliness affect in a material way the morale of an institution.

The progress which has been made in the construction and arrangement of a schoolhouse, and in the manufacture of supplies and equipment which are a part of a modern structure, has also been demonstrated in the devices and agencies employed in keeping the same clean.

There is no excuse, for instance, for dirty floors. Modern devices and methods are at the command of the average school custodian which will enable him, at a minimum expenditure of time and labor, to keep things neat and clean. What applies to the floor applies with equal force to the walls, the hallways, staircases, entrances, and the like.

And what applies to the interior of a schoolhouse applies to the premises which surround it. There is no excuse for litter and rubbish lying about the schoolgrounds or playgrounds. A school plant once brought to a stage of neatness and cleanliness can be kept so with little additional effort. But such effort must be constant and continuous. All those who spend their days in a schoolhouse must be taught to cooperate with those who are held responsible for the housekeeping side of the school plant.

Finally, it must be conceded that a well-kept and cleanly schoolhouse exerts a wholesome and beneficent influence upon the youth whose training is received within its walls. The habit of cleanliness inculcated in youth is likely to be fostered through life.

These men, as members of the staff of state departments, of the faculties of universities and colleges, or as individuals, enable school boards to attack their housing problems scientifically and accurately, with a proper basis for the ultimate solution.

The professional training of superintendents and principals now includes courses on buildings, equipment, and finance, so that the school executive of tomorrow will be more able to aid his board in securing information which will enable it to formulate its programs. He will be able to state definitely his needs and requirements and check the plans which are submitted for the details which will help or hinder the educational program.

Good vs. Bad Architects

Although too much credit cannot be given to the great school architects of the country for the present excellence of many school buildings, many schools are housed in buildings which have been ruined by architects who do not know the field. As the school organization becomes more and more efficient, the buildings must keep pace in special design and organization to afford the greatest efficiency in use.

Although certain rules and standardizations may be set up, the educational program and the needs of each district and community must be worked out for each building, providing for changes and additions which seem imminent in the future. This is not always apparent to the casual observer of plans. The efficient plan may not appear so much different from the faulty one, but the third day of school use will show the difference.

Exterior design makes little difference, but careful planning is demanded, and a feeling on the part of the architect that all problems are secondary to those of use. School authorities must demand of their architects, training and experience in schoolhouse planning, as they demand training and experience of their teachers.

The lack of financial possibilities, which is mentioned so often, is very often a real factor in school administration, but in many cases it simply means that no one has taken the time to sit down and determine just what the financial possibilities are over a term of years. It is very often amazing to see what resources a school community has when they are carefully worked out under the terms of the law. The amount of money available over a period of years, if advantage is taken of quick repayment possibilities, will very often be greater than the amount needed, provided the program of financing and building are continuing, and no gaps or delays are permitted.

A Building Program

The smaller cities and towns have often envied the ability of larger cities to employ research departments for making continual surveys of schoolhouse conditions, for laying out building programs and planning schools for specific uses. The small towns have felt the need of such service, but have not known how to get it. This service is very often available from state departments, from state universities and other colleges, from individual experts and from certain firms of architects who have associated with them school research men.

The first step in any program is a survey of present housing conditions, to determine the adequacy and present educational value of the plant. This study and the consequent publicity are very important.

Population studies of the whole district and studies of comparative enrollments over a period of years should be made, so that the total needs may be determined. Then the situations and enrollments of the various schools should be made, for it is often possible to rearrange district boundaries to relieve present pressure, as well as to fit the future program. This enables the board to plan added facilities in centers to relieve several buildings.

When the facts concerning the present situation and future needs are assembled, a program to take care of them should be developed. This program will deal rather with children and types of schools than with detailed building plans. The rough cost of this program may be determined and spread over a period of years actually determined by the financial possibilities. Then the choice of units for attention should be made and the others set out at definite times throughout the period. The repair program may then be planned to hold the deferred units in service in as good condition as possible, until the time set in the program.

The repair and modernization program must be planned as a whole, or the expenditure for major repairs will, in many cases, be wasted. When the units are set out in order, the needs, educational and otherwise, of each building, should be carefully worked out so that new units will be economically efficient, providing the necessary facilities and no more.

This is another problem for careful consideration. Buildings should be planned to house a definite educational program. This must be determined by the educational authorities and worked out into a definite statement of dimensions, capacities, relations, and equipment before the architect begins his preliminary sketches. All of the details possible should be listed and decided upon before the plan is begun.

The matter of these details may well be referred to some agency which deals with the school planning in terms of details, and can bring to bear on the problems, the benefits of continual research and the experience of planning schools.

THE AMERICAN School Board Journal

EDITORS:



WM. GEO. BRUCE

WM. C. BRUCE

A Timely Expression on School Revenues and Taxation

THE suggestion has frequently been offered in these columns that the educators of this country, who are concerned with the question of school support, must in the future go one step farther and examine the subject of taxation as a prerequisite to an adequate school revenue.

Here it has by no means been inferred that the educator must become an authority in the field of taxation, or pose as an expert on the subject. But it has seemed highly desirable that those who make the attempt to publicly discuss taxation in the light of school support should at least know what they are talking about.

The educator who pleads before legislative bodies for a more liberal school support usually is tempted either to hold that the present system of taxation must be administered with greater equity, or else that new tax sources must be discovered. It is usually when he is challenged to show where these new tax sources are to be found that he is confronted with a problem which has engaged the attention of the economists for many years.

But in attempting to point to new tax sources some of the most brilliant educators have fallen into error. They have proposed expedients in the form of new tax measures which were trivial and unsound, or made suggestions which in the light of tax experiment and experience were bound to fade into early oblivion.

The most gratifying symptom of an awakening is found in the fact that greater familiarity with the question of taxation in its general aspects, comes in the form of a splendid study on the subject recently published by the National Education Association. It is the first venture by that great organization in the direction of a better understanding of the general subject of taxation and its relation to the cause of adequate school support.

The approach to the subject is along sane and sound lines, and presents in a terse and somewhat compact manner the fundamentals of taxation. It makes plain some of the things which every educator ought to know. It tells that the property tax, as administered in the United States, "is the worst known in the civilized world, that its abolition is recommended, and that new sources and systems are possible."

Sales and severance taxes, inheritance and other forms of taxation are briefly and accurately described. The study also engages in a brief analysis of the personal income tax as administered in the several states.

The fact that the educators of this country are recognizing the importance of giving attention to the matter of taxation, as a prerequisite to the orderly progress of educational endeavor, and are giving expression of this recognition through the medium of a powerful representative organization, is highly gratifying. Equally gratifying is the further fact that in its introductory discussion of the subject it engages in no fads and frills and keeps safely within rational and accepted lines.

Thus while the document is merely intended to serve as an introductory to an important subject, it is, nevertheless, timely and well conceived — and tends in the right direction. The educator who holds himself in any tax discussion he may engage in, within the compass of this compact and brief study, will be on solid and safe grounds.

Standardization of School Supplies and Equipment

THE supplies and equipment which have gone into the American schools during the past quarter of a century have noted the handiwork of both the inventive genius and mechanical skill. The producers

have during this time vied with each other in the matter of quality and price, and have gradually improved their product not only in neatness of design, color, and the like, but have also infused greater utility and service in the articles intended for school use.

The competitive spirit, which is manifest in the several branches of industry, as it is in all other gainful occupations, tends not only to create the new and more utilitarian, but is apt to lead to the production of the odd and superfluous as well. Wherever design, form, size, or color come into play, there is a tendency also to carry these to the extreme in point of variety and thus engage in extravagance and waste.

The school-supply industry has not been entirely free from this sort of thing. In order to meet what was believed to be the whims and notions of the consumer, new shapes, new designs, and new colors were engaged in. The enterprising producer must "go his competitor one better"; the salesman must have a new talking point. But, much of this spells a superfluous variety and a consequent waste.

The several articles which go in or about a school building under the title of supplies and equipment serve, in the main, a utilitarian purpose. Neatness in design, color, and finish is desirable but, on the whole, few articles in this field lend themselves to the element of variety without impairing their utility or without entailing a waste. Thus the idea of simplification has suggested itself. Greater uniformity in color, shape, and finish make for economy.

The Division of Simplified Practice of the United States Department of Commerce has turned its attention in recent years to the matter of standardization in articles of manufacture, and has eliminated to a surprising degree the superfluous and wasteful. In the field of school equipment, something has also been accomplished. The division has recently made a study of the color finishes employed in the production of school furniture.

The results of its findings and conclusions, which deal with the color-finish standards as applied to plain oak, quartered oak, and maple woods, are published by the National School Supply Association. Illustrations, showing samples of the several finishes in color, also appeared in a recent number of the AMERICAN SCHOOL BOARD JOURNAL.

The foregoing association urges coöperation and explains the purpose of the standardization in color finishes in the following language:

"In the interest of economy of production, in the interest of service to the schools, in the interest of harmony in color finishing of all school equipment, in the interest of simplified practice, so strongly urged by the United States Department of Commerce, it is suggested that you require a certified color finish panel as an exhibit in the purchase of all school equipment and that you require the finished product to conform reasonably close to that certified color finish.

"This is a safeguarding program, the result of the coöperative action of school officials with manufacturers and distributors in the school field. The degree to which it will function is dependent upon a continuance of that teamwork so much in evidence during its developmental stage."

Chicago's Lesson in School-Administration Procedure

THE larger city school unit, with its volume of activities and widened scope of service, very naturally commands the attention of the smaller town school unit. The one, by virtue of the bigness of things, can engage in innovations and departures which the other cannot hope to attempt. The larger stands out, by virtue of its size before the smaller, and, in a sense, attracts, leads, and inspires.

If the larger school unit, for instance, can afford to engage in research labors and experimentation along professional and administrative lines, the smaller unit, not so happily situated, may nevertheless profit by the results achieved. There are problems which grow specifically out of size, scope, and volume, or those which may arise out of mere local exigencies, and which call for their own peculiar treatment. Thus a solution reached in one community may be inapplicable to a similar problem encountered in another community. Again, the results of experiments engaged in by one community may prove suggestive and helpful to every other community.

At the same time, the larger school unit may hold to policies and methods which ought to be avoided by others rather than emulated. The difficulties and embarrassments which are bound to culminate when

unwise policies and methods are employed, must serve as a warning to other school systems.

The predicament in which the Chicago school authorities find themselves at the present time, provides a remarkable object lesson. It tells the school administrative world what not to do, rather than what to do, if calamity is to be averted. It demonstrates in a striking manner what vague theories and keeps safely within rational and accepted lines.

The Chicago school system is confronted with a colossal deficit of twenty-seven million dollars. Its officials have on bended knees begged bankers and financiers for enough money to keep the schools going. The specter of closed school buildings has for weeks been before them. The chagrin and humiliation to which the school authorities are subjected is better imagined than described.

A situation such as recorded in the preceding paragraph is not the result of one day's doings. It is the culmination of years of blundering deliberation and of a series of unwise actions. The thoughtful and circumspect school administrator not only recognizes immediate needs, but he also anticipates future demands. In building a next year's budget he does not forget that other years are to follow. In negotiating a debt he also realizes that some day it must be paid. His calculations and estimates contemplate the future to a reasonable degree.

Financial solvency is as essential to a school system as it is to a banking institution, or any commercial enterprise. No household can sustain itself if the outlay exceeds the income. No community can maintain its financial stability if it continues to spend more than it receives. No school system can continue unless there is a proper relation between its receipts and its expenditures.

It is regrettable that the nation's second largest city does not lead in school-administrative labors, and thus set examples and standards for emulation by the thousands of other school units. The lesson, in administrative procedure, however, which Chicago offers to the school world, deals with the calamity that is certain to follow unwise action. The value of this lesson lies in the fact that it sets forth a solemn warning against reckless policies and thoughtless methods.

The American Renaissance in School Architecture

THERE was a time when an architect, with a few colored perspective drawings under his arm, attractively graced with trees and shrubbery, would drop into town and persuade a school board to give him a contract to plan and build a schoolhouse. An impressive personality and fluent speech would win the day for him. The floor plans were a secondary consideration.

The result was a series of clumsily designed and poorly arranged structures. Where the ornate was attempted it found expression in ugly façades and bulging roofs. The buildings, in many instances, were neither economical in point of construction nor in their subsequent use. They excelled in causing repair bills.

"But, there has been a tremendous change. The same spirit of enterprise and progress which has characterized American life in its industrial, commercial, and professional activities, has asserted itself in the field of architecture. The modern schoolhouse presents the highest expression of the art and science of the architect-engineer.

The marvelous transformation which American school architecture has undergone is well summarized by Alice Barrows, specialist in school buildings of the United States Office of Education. She recently said:

"The planning and erection of school buildings are becoming a highly technical task, which demands the combined knowledge and skill of educators, health specialists, building and landscape architects, and heating, ventilating, lighting, and sanitation experts.

"The modern school building, which has been developed during the past twenty years, represents a radical departure from the school building of previous periods. Owing to changed social and industrial conditions, which have deprived children in cities of many of the educational activities which formerly existed in the community life outside of the school, the curriculum of the modern school has been enriched so as to give children much greater opportunities than formerly.

"The school building has had to be changed to meet the new educational demands. At the same time advances in the science of heating, ventilating, lighting, and equipping school buildings are making it pos-

sible to prevent many of the health defects, that is, bad posture, poor eyesight, respiratory troubles, etc., which developed in children as a result of the conditions in the older type of school buildings."

In other words, the American schoolhouse of the modern type, which is the world's best expression of the architecture applicable to that kind of institution, is the creation of the educator, the architect, and the engineer. It is an achievement of which the architectural profession of this country may well feel proud, but it is even a greater tribute to the American school administrator who has exacted the best that the art of architecture can contribute to the cause of popular education.

Beautifying School Grounds and School-Board Support

THERE are periods in the year when school authorities may well turn their attention to the beautification of school grounds. The planting of shrubbery and plants is a springtime task. Those who have given attention to the subject of landscape gardening, as applied to school grounds, find that with a proper stimulus, by school authorities, much may be accomplished. The question, which must primarily be determined, is whether it is to be a community project or one fostered by those immediately identified with the school system.

"Anyone in the community may take the initiative in creating interest in the undertaking," says Edna Hatfield Edmondson of the Indiana University. The superintendent of schools, a member of the local art club, a member of the local parent-teacher association, a member of any civic group, a school teacher, a school principal, or a pupil in the school may take the lead. A group of people may be called together where a full discussion may be had. Out of the meeting a chairman for the project may be appointed and committees arranged for carrying out the details. The more persons working on the committees, the more widespread will the interest be. Just as many persons and groups in the community as possible should be asked to join the undertaking.

"Whatever type of organization is worked out, the interest of the community in the plan will probably be expressed in three general groups: (1) community organizations, (2) teachers and pupils in the schools, and (3) the school board and school officials.

"In many communities school boards and school officials have long been interested in this special subject and have taken justifiable pride in planting and beautifying school grounds to the limit of their financial resources and of neighborhood interest. They will therefore welcome community support in starting the project where little or nothing has been done, or in increased efforts where something has already been accomplished."

There is an opportunity, too, for the public-spirited citizen to add his mite to the beautification of the school grounds by donating trees, shrubs, or flowers. Such gifts have value and meet with due appreciation.

The Schoolmaster and His Compensation

THE publicity which attends the compensation accorded to those identified with the public service sometimes leads to unpleasant discussion. The average man does not care to have his income heralded from the housetops. The salaried school executives are constantly exposed to the scrutiny of a critical citizenry.

The comparisons made between the salaries received by this, that, and the other public servant present, however, some advantages as well as disadvantages. The educator has, at times at least, the doubtful satisfaction of knowing that he is not being overpaid. He frequently hears that the college professor has a smaller income than the prize fighter and that the average business executive enjoys a higher compensation than does the school superintendent.

"Perhaps if Oregon had more highly paid schoolmen it would not need such high-powered sheriffs," said George Willard Frasier, president of Colorado State Teachers College, in an address delivered at Portland, Oregon. "Why, for instance, does Grant county pay its superintendent of schools only \$1,500, while its sheriff draws \$4,000. Why does the State of Oregon pay its highway engineer \$7,200 and its budget director \$6,000, when it pays its state superintendent of schools only \$4,000. It must be that budgets and roads are more important than education in the eyes of Oregon legislators."

The Hick Superintendent at Atlantic City

Dear Editor:

Just a line to tell you about the Atlantic City meeting in case you didn't get to go.

I hardly expected to attend the meeting myself this year after the results of the school election last month when Olie Swenson who owns the big garage on Main street was elected to the board on the platform of economy. But that's where I was wrong, for at the meeting of the board in February, Mr. Swenson brought up the subject himself and made a motion that the superintendent be instructed to attend the Atlantic City meeting, saying, "I know I was elected to keep down the tax rate, but I got so many new ideas about running my garage last month at the Auto Show in Chicago that the trip more than paid for itself. If our superintendent is any good, he will do the same thing at that schoolmen's meeting. And if he doesn't, we will hire someone who will. Do you see what I mean?"

During the next few days wife pressed that old blue serge suit I keep kind of special to wear when I speak at Rotary clubs and I still had those handkerchieves and socks the high-school children placed on the tree for me at Christmas. These, together with the half a dozen shirts the wife's mother sent me at that time fitted me up to perfection without my going to any great extra expense.

As soon as I was sure I was going, I wrote to Phil Harmon, that supply man I met in Boston and with whom I was to room in Cleveland, and by return mail he writes that he had made reservations for me at the Hotel Traymore and that the New England superintendents were going to charter a special train which provided for a pilgrimage to Valley Forge and a sight-seeing tour of Philadelphia. He invited me to join them at New York City.

Leaving home Friday afternoon, I drove Old Timer down to the junction, caught the flyer to Chicago, and found a number of schoolmen on the train. Prof. Jensen from Aberdeen showed me a bit of work he has been doing on the problem of equipment and for the teaching of science in small high schools. His study looked interesting to me and which I believe it is just what we need for Green River. Changing at Chicago I landed in New York at the Grand Central station about four hours before the New England Special was due.

Editor, if you have never seen that station you have never seen anything. Its the most wonderful place in the world, not at all like ordinary railroad stations which only have one cuspidor, a gum slot without gum, and a ticket window that needs washing and is never opened except just before train time.

This New York station is entirely different. Its more like a football game as far as crowds are concerned, except all the seats are free. You can get a haircut or a bath or a toothbrush and some paste or a fresh handkerchief or a pair of pajamas or some clean socks or anything you want by just putting a dime in a slot. In fact, you can put a dime in one slot and a liveried chauffeur with a fine eight-cylinder car will come up and drive you wherever you want to go. The truth is, all you have to do is catch your train, the railroad company will do the rest. You don't have to remember to bring a thing, they are that glad to see you.

But I am not getting on with my story. Of course, the first thing I did after I got off the train was to step into the barbershop where I thought I'd sort of get my bearings, but instead, I got an awful shock and for a moment or two I thought perhaps I was in a hospital. Here were 50 barbers, all dressed up like doctors about to enter an operating room, and there was not a game of cards of any sort in sight, and no funny magazines with the covers torn off, and no one seemed to know anyone else. I hung around for a minute or two but as no one spoke to me, I went out to the sidewalk.

Outside the station I found an awful gang of people all hurrying in the same direction. I thought sure there must have been an automobile accident or a fire up the street a way, so I started to follow the crowd. After I had gone a block or two, I glanced across the road and what do you know, the crowd was all hurrying in the other direction, so I turned right around and followed it back again.

I couldn't seem to make out what was causing the excitement so I stopped a man on the sidewalk and asked, "How far are they going?" and he replied, "I don't think they will go any farther in either direction for the next few months. General Motors has hung around 42 for weeks."

By that time I was back at the Grand Central station with still a lot of time on my hands, so calling a taxi I told the driver to take me to Wall Street. And what do you know, I was never more surprised in my life, for instead of finding the place a turmoil of money grabbers like what they showed pictures of in magazines, it was almost deserted. It was a quiet and as inconspicuous as any street in town.

However that taxi ride across the city was well worth the price for I can't think of anything much more exciting than the way those drivers go through heavy traffic. Three times between Wall Street and the Grand Central station that afternoon we either bumped the car in front of us or were bumped into, and not once did the occupants of either car get out to examine the damage. In every case they were satisfied with just cussing a few cuss words.

The trip to Valley Forge was different from what I expected. Instead of cold stormy snow covered hills, the early joys of a glorious Sunday in spring were bursting over the landscape as we approached this sacred ground where Washington and his little band held on like grim death for the sake of a cause that has made us what we are. The tiny building which housed his headquarters, the little school, the open bake-oven, the reconstructed hospital and the priceless treasures in the old museum told more eloquently than words the tale of the darkest hours before the dawn of a new era.

Leaving Valley Forge, and Philadelphia, the New England boys arrived at Atlantic City late



PRESIDENT CODY GREET'S HIS SUCCESSOR,
SUPT. N. R. CROZIER

Sunday afternoon in plenty of time for the real work of the convention.

Atlantic City is a great convention town. Every noontime the folks go out and pull in a net full of deep sea fishes. After that they scrape them, and before you know it they are turned into fish bouillion, served at all the hotels.

The auditorium there is the biggest in the world. The book of directions that goes with the hall claims that a 13-story building 500 feet long and 200 feet wide could be constructed within the exhibition hall and there would still be 100 feet of space for an alleyway around the building. They say that if Babe Ruth got up on the platform at one end of the hall and knocked his longest home run, it would not reach the other end of the room.

On the wall at one end of the hall was an American flag, 100 feet long and 60 feet wide, and yet it did not look large. That flag is bigger than most building lots in the big cities, but compared with the remainder of the wall space it did not attract one's attention.

I suspect the secretary of the Chamber of Commerce of Atlantic City must be a Californian, or at least have taken a short course at some summer school out there in the Golden West, for in this New Jersey resort they have the biggest and the most of everything in the world. Taxi fares are the highest in the world. There are fewer good looking girls here than any place else in the world. More lip stick is used in Atlantic City than in any other city in the world. The largest electric sign in the world is on the Boardwalk. The greatest number of baby carriages for adults is in Atlantic City. The man who invented the two-pants suit of clothes is a native of Atlantic City, so I've been told, and as I understand it, it was he who invented that eight mile ramp that leads to the most beautiful ballroom in the world, upstairs in the Convention Hall. They have more doors in their convention hall in Atlantic City and use fewer of them than in any other city in the world. Why they even eat more oranges and grow fewer in Atlantic City than at any other winter resort in the world. But enough of that.

The addresses and the topics selected this year were without doubt the most successful of a decade. Education in the Spirit of Life was the theme of the convention and all through the week, like a golden thread, ran a keynote of friendliness; that is, if keynotes can run like threads.

Speaking on the topic of Education for friendliness, President Frank Cody delivered an address which brought educational thought and practices back to earth, where with both feet firmly planted in realities, educators were able to get a clear view of education, and were able to take back to teachers in their home districts the news that in spite of present-day commotion about expensive school buildings, revised organization, and scientific measurements one great educator, at least, was old-fashioned enough to stand up before ten thousand fellow workers and state that "in the last analysis, our education rests on the classroom teacher. Buildings, equipment, organizations, are but bulwarks to strengthen him."

Continuing, Dr. Cody said: "Education in the spirit of life must recognize and use the great motive forces that control living. Life is progressive. It is continually advancing. Education must discard the out-grown categories of a bygone age, and acquire a scientific attitude in order to understand and carry forward the amazing discoveries of our age. Scientific achievement has upset the old social order. Education must be open minded, flexible, and ready to cope with new situations, mental, social, and physical. We cannot sit in our classrooms and prate on mid-victorian virtues to sophisticated young people who smile at old fogies. We must make their sophistication scientific and intelligent, and a new order will result that is sure and firm, based not on an obnoxious Mrs. Grundy, but on reason."

(Continued on Page 132)



Harding High School, Bridgeport, Conn. Caldwell, Beckwith & Walker, and Wm. B. Ittner, Architects

Non-sliver — Non-slip



In shop service Bloxonend is laid directly over wood floated slab. In gymnasiums it is usually laid over 1x4 floor strips (for utmost resilience).

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Bloxonend is a handsome floor. It is fast, resilient and comfortable under foot. It lasts a life time and stays smooth. Nearly all prominent school architects specify Bloxonend for the gymnasiums and shops of finer type buildings. If it is not included in the specifications for your new school, write for free descriptive booklet and sample. Also send us the name of your architect.

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Stays Smooth*

Cosmopolitan High School, Reading, Pa.

Architects: Ritcher and Eiler.

Contractors: Michael Melody and Son, Inc., Philadelphia

School Honors for FENESTRA

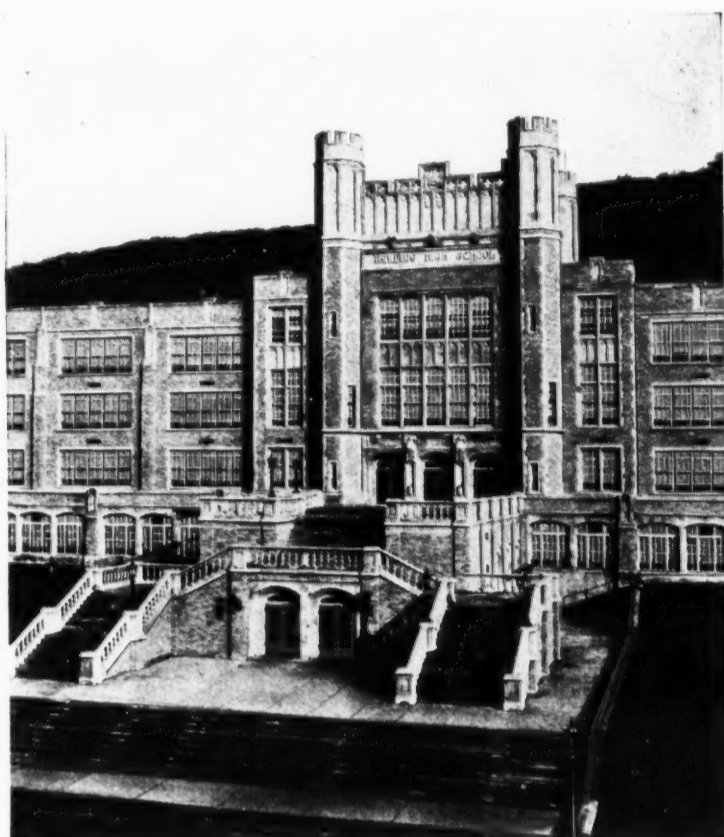
Gracefully set into the mountain side, approached by broad terraces with their wide steps, this beautiful Reading High School is an outstanding example of modern school design and construction.

That Fenestra Steel Windows were chosen for use in this monumental building is a mark of honor—awarded after examination, and tests had given assurance of genuine merit.

At first glance it would seem that the slender lines, the sparkling panes and distinctive design of these better steel windows were the prime reasons for their selection. But many other factors influenced the final decision—bright, sunny rooms to relieve eye-strain; fresh air everywhere, brought in through easily operated ventilators that never stick, warp or rattle; snug-tightness during storms; and finally such practical advantages as: easy washing from inside, convenient shading and economical replacing of broken panes.

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"Fenmark" Windows for Schools

School Children of the Board Member

Garry C. Myers, Ph.D., Cleveland, Ohio

It is human to protect one's children; it is human to promote their seeming welfare. When no one else is looking on except our family we may be very exacting of our children. When, on the other hand, someone else finds faults in them we are very likely to come to their defense. The teacher is human like the rest of us. She looks after her own interest. She strives to stand in well with the members of the school board. Of course; for by them she is appointed and by them she is also fired.

She knows that the man or woman serving on the board of education is also human. The teacher, therefore, unconsciously or consciously plays upon the human frailties of the school-board member who may, in turn, accept the teacher's special favor to his children.

Other children of the school and other parents of the neighborhood expect such favoritism by the teacher; upon the slightest provocation they indulge in dangerous gossip about their observations.

Special attention to any other child may go by unnoticed; but if the school-board member's child receives the same, there rises quickly from almost every family the charge of partiality.

Often the older school child who is accused of being favored suffers, too. His jealous comrades may dub him as the teacher's pet even when he is not. A tactless teacher also may deliberately favor him against his honest wish. In either case, his school mates are very likely to be jealous of him and to plot against him.

When there is charge of favoritism of this sort, the teacher is almost sure to grow unpopular in the whole community, and certainly to lose the rest and the coöperation of her children.

Nine chances to one she will soon have problems of discipline when finally the whole board of education will be called upon for action. The end may come in her dismissal; the board may fail to reappoint her the next year. The careers of some teachers who otherwise were promising may be ruined by incidents of this sort, incidents which might have been avoided.

The board member whose children have been favored also suffers in such cases. His colleagues on the board lose confidence in him and his fellow citizens are disappointed. Long friendships may be broken, many enemies created, and his services may end with the disapproval of the whole community—all coming from a little human vanity.

These facts warrant greatest caution by the teacher, on the one hand, and by the board member who is one of her school patrons, on the other. If they are wise they both will lean backwards trying to be fair to all. The board member is older and has more of life's experience than the teacher has. He, moreover, does not have the same measure of temptation to play favoritism as the teacher has. Therefore, he ought to make the first move toward prevention of unnecessary difficulties. Before school begins, let him confer with the teacher and prevail upon her to be always on her guard against doing anything which could be construed as particular consideration of his children. Then, as soon as there arises the first evidence of what seems to be favoritism, let the member of the board have a private conference with the teacher with a view to leading her to avoid any such signs of indiscretion in the future.

Every member of a board who has children in the school over which he has official charge, has potential troubles. If he has foresight, he will use sufficient wisdom to avoid their development.

THE SUPERINTENDENT AND HIS STAFF

"The question often arises in meetings of the board of education concerning the basis on which the superintendent of schools makes his recommendations to that body," recently said Supt. Glenn H. Kelly, of Houghton, Michigan. "This is more often true when the recommendations concern the nonacademic departments of the schools. The impression is not uncommon that schoolmen, who have had teaching experience in the academic field, are unfamiliar with the so-called nonacademic subjects. The strength of the superintendent's position in making recommendations to the board of education depends largely on his administrative organization and policy." Superintendent Kelly continues his discussion as follows:

"While it is apparent that the superintendent of schools cannot be familiar with all the details involved in the teaching of the various subjects offered throughout the schools under his supervision, yet a thorough understanding of, and familiarity with the larger aims of the different courses is an essential part of his equipment for his position of educational leadership. A general knowledge of the needs of a department is not sufficient ground, however, on which to make a recommendation involving changes in courses of study, policies of the board of education on educational matters or the expenditure of money for any department of the school system. The superintendent bases all recommendations to the board of education on a detailed study of the requirements of the department for which he makes the recommendations.

(Concluded on Page 72)



MORE

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TWO more great universities—Illinois and Kentucky—have conferred on Bonded Floors of *Sealex* Linoleum the highest degree that it is in their power to grant to a floor. They have selected this modern resilient flooring for the new buildings illustrated on this page.

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UNIVERSITY OF ILLINOIS—This photograph shows the new Library addition; that on the upper left, the Material Testing Laboratory. *Sealex* Battleship Linoleum installed in both buildings by Bachman Co., Decatur, Ill., Authorized Contractors of Bonded Floors.



MCVEY HALL, UNIVERSITY OF KENTUCKY—*Sealex* Battleship Linoleum installed in this building by R. B. Hayes, Lexington, Kentucky, Authorized Contractor of Bonded Floors.

fully decorative, suited to play a part in the most sumptuous interior. All are resiliently comfortable and quiet underfoot, and exceptionally easy-to-clean—made spot-proof and stain-proof by the revolutionary *Sealex* Process.

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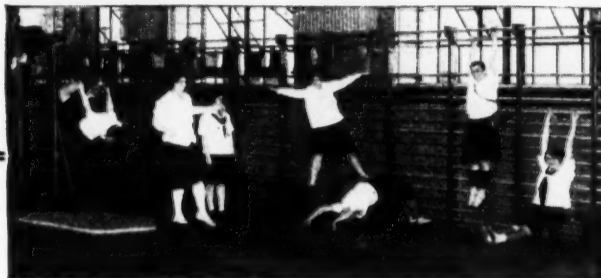
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(Concluded from Page 70)

"Before bringing matters to the board of education for consideration the superintendent of schools takes into confidence and confers with the principals, department heads, and teachers involved. This does not mean that his final conclusions are a composite of their opinions or the opinion of any one of those consulted. The final decision before bringing the matter before the board of education must rest with the superintendent. His final judgment is the result of the intimate and specialized knowledge of the department heads and principals viewed in the light of his knowledge of the general and specific objectives of the particular department in question and its relation to the rest of the school system.

"The superintendent does not wait, however, until there is a matter which requires the attention of the board of education before conferring with his principals and department heads. He is on the alert to gather suggestions from his colleagues in casual conversation both in and out of schools. He holds formal conferences. He gathers suggestions in informal conversations concerning problems in the various schools and departments. Whenever the superintendent has visited a school he does not leave the building without having an informal talk with the principal at which time the principal is invited to bring any problems to the attention of the superintendent or discuss with him any phase of the schoolwork concerning which the superintendent should have more intimate knowledge."

America now needs not greater cities, but greater character.—Roger Babson

SCHOOL LAW

School-District Property

The extent of ground held by a school district is for the board of directors to determine, though property devoted to other than educational uses must be treated as separate from that set apart for school activities. (Pa. school code of 1911, §601 et seq. Pa. statutes of 1920, §4826 et seq. 1.) —Borough of Wilkensburg v. School Dist. of Borough of Wilkensburg, 148 Atlantic reporter 77, Pa.

The directors of a school district have implied authority to erect a play shed necessary to protect the pupils from the inclemency of the weather (Oreg. laws, §5032, subds. 3, 5). —Hopkins v. Howard, 283 Pacific reporter 18, Oreg.

School-District Taxation

A tax levied to meet the bonded indebtedness of a school district must be levied either as a tax for educational or building purposes, and a tax levied for either of such purposes cannot exceed a statutory rate. —People v. Illinois Cent. R. R. Co., 169 Northeastern reporter 178, 337 Ill. 276.

Teachers

A county board has no jurisdiction of appeal from a decision of the local board of trustees not to reemploy the teachers. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

A local board of trustees has power, after the expiration of a teacher's contract, to employ any legally qualified teacher. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

A showing that a local board of trustees refused to renew a teacher's contract did not authorize an appeal to the county board. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

The action of a local board in electing new teachers holding proper teachers' certificates was

properly sustained by the state board. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

A county board has no power to order the local board to elect and employ any particular teacher after the expiration of a contract. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

The power of a local board of trustees to select teachers is absolute, and is subject only to the confirmation or rejection by the county board. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

A county board of education has power only to confirm or reject teachers employed by a local board. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

Neither the teachers nor the parents in a district had legal standing to force the reemployment of teachers after the expiration of a contract. —In re School Dist. No. 4, Charleston county, 150 Southeastern reporter 776, S. Car.

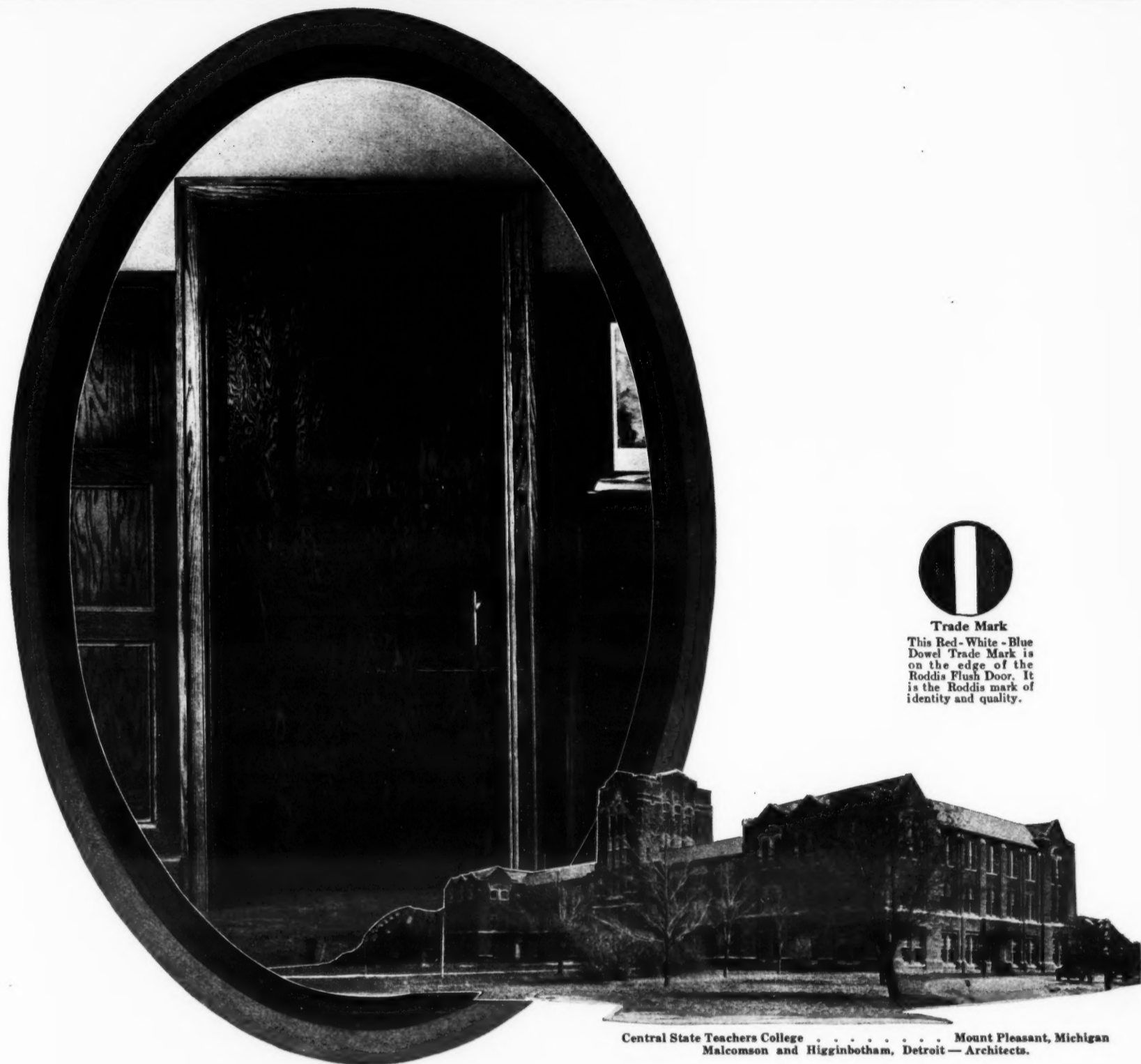
LAW AND LEGISLATION

—The state educational department of Wisconsin has advanced the opinion that "A person who is a stockholder in a telephone company is not eligible to hold an office on the school board of his district, if the company installs a telephone in his district school house."

—Supt. Frank A. Bouelle, of Los Angeles, Calif., in his monthly bulletin reminds the principals that "the law specifically states that every public school in the State of California must admit children between the ages of 6 and 21 years whenever they apply. While it may not be advantageous to have any child enter during the last week of school, there is no alternative and the child must be admitted if the parent insists."

—The supreme court of California has recently sustained a ruling of the superior court of Alameda county in the matter of school-district liability for negligence in the protection of pupils. The question involved the degree of responsibility with respect to pupils of schools or the general public using the school grounds and buildings.

(Concluded on Page 74)

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[Signed] C. C. Barnes,
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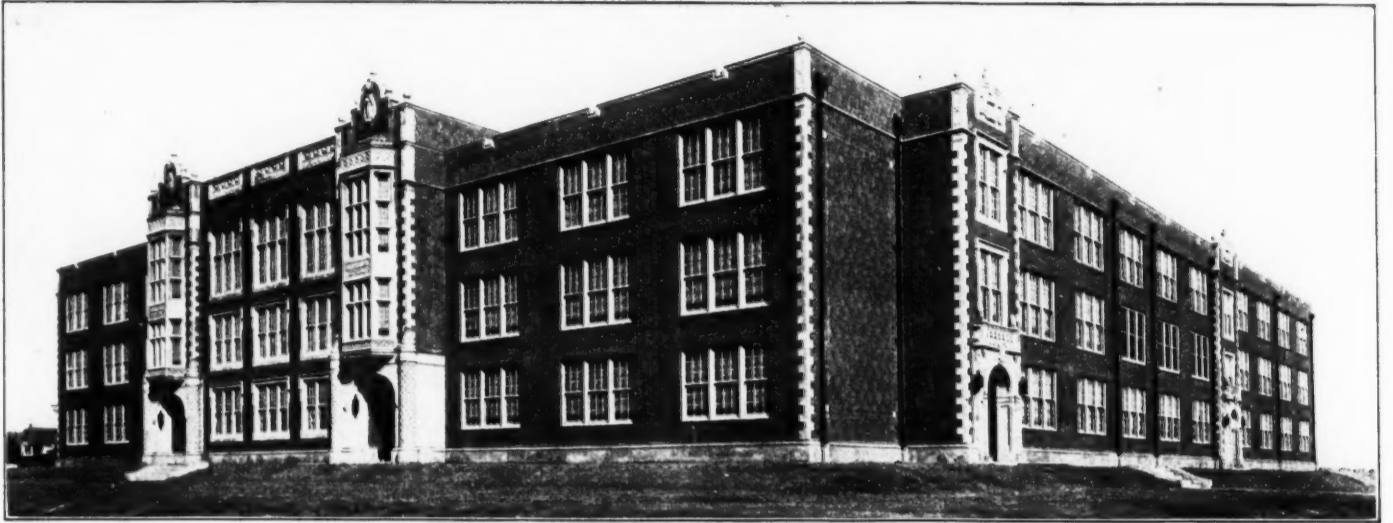
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(Concluded from Page 72)

The ruling was given in the case of Martin Ahern, a student of the Livermore High School, who lost several fingers in an unguarded power saw in the school shop. The decision held that school districts have greater liability than the general public in safeguarding pupils and awarded damages of \$3,500.

—The state education department of New York, on request, gave the definition of tardiness as follows: "The pupil is tardy if he is not in his appointed place when the time for starting school arrives." Charles L. Mosher, the director of the attendance division, adds: "In many schools laxness of management and indefiniteness of requirement do much to nullify the purposes of the school in much of its work. The training in accuracy and the development of an appreciation of it through certain studies, for instance, are largely nullified if the general atmosphere of the school is quite the opposite. Principals and teachers are doing something much more important than saving a minute when they teach boys and girls to be in school on time and the effort put into the process is quite worth while from an educational standpoint."

—The circuit court of Ingham county, Mich., has rendered an opinion, ordering the payment of more than \$12,000 to the State of Michigan by Thomas E. Johnson, former state superintendent of public instruction. The court ruled that Mr. Johnson must replace county institute funds, the amount of which was not specified, in which alleged shortages were noted. Mr. Johnson was removed from office in 1926 by former Governor A. J. Groesbeck, at which time specific charges were made that he accepted salaries from the state for acting as director of vocational education. An audit of the books showed discrepancies in payments of funds to the department. Mr. Johnson carried an appeal to the supreme court which ruled that the governor had authority to remove a state official for cause.

—Beginning with September 1, 1930, a new law will go into effect in Texas which provides that physical-education courses approved by the state

department must be taught in the public schools of that state.

—The State of Texas has appealed a decision of R. B. Minor, district judge, holding unconstitutional the rural-school law. The Minor decision enjoined the state board of education from carrying out the provisions of the act authorizing \$5,000,000 for two years' school aid. The law was attacked in a suit filed in the name of a taxpayer in a school district which does not benefit by the rural-school act.

—The question arose at Manitowoc, Wis., whether the board of education has the power to transfer property originally acquired for educational purposes. The Wisconsin Supreme Court, in an action on appeal of the city council in an injunction suit over the transfer of a junior high school by the school board to the vocational board for school purposes, has held that the transfer is legal. The decision is specific on the issue of the right of the board of education to transfer the property and extends to the general authority of the board in control of school property.

—In California the question of the legality of one school district upon others accomplished by sending out busses into the other districts and gathering up children has long been an open question. As yet the matter has not been passed upon by the courts.

School Code sections 1.70 and 1.80 providing respectively for the transportation of elementary school children and transportation of secondary school pupils—state that the governing board of the district may provide transportation to those pupils who attend the schools of the district. If they may furnish transportation to pupils attending school in their district without restriction, it follows, logically, that they may furnish it regardless of the residence of the pupil. The situation is one which can be altered only by legislation prohibiting governing boards from furnishing transportation outside the boundaries of their respective districts.

—The attorney general of Wisconsin recently rendered an opinion as to the compensation granted to rural-school-district secretaries. All that a secre-

Following are a few typical Libbey-Owens installations

Providence High School, Chicago

Grosse Pointe High School,
Grosse Pointe, Mich.

Roosevelt High School, San Jose, Calif.

Dr. M. E. Dodd College for Girls,
Shreveport, La.

Morgan Hall, Harvard Business School
Cambridge, Mass.

Woodrow Wilson High School,
Dallas, Texas (illustrated above)

Nathan Hale School, Cleveland, Ohio

C. M. Bardwell School, Aurora, Ill.

tary can receive is \$15 a year, and \$5 extra for every school where the district has more than one school. In some districts, the secretaries are voted salaries ranging from \$70 to \$140 a year. The attorney general holds that all sums paid over the sum provided by law, be reclaimed for the school treasury, on suit by the taxpayer.

The question: "Can a member of a school board legally sell merchandise to a school district?" was submitted to the attorney general of Wisconsin recently. His reply was: "A sale of merchandise, by a school officer to his school-district board, involving not to exceed one hundred dollars in any one year, does not constitute a violation of the provisions of the section mentioned, although a sale exceeding that amount in any one year is a violation of said statute punishable by imprisonment in the county jail not more than one year, or in the state prison not more than five years, or by fine not exceeding \$500, as specified in the statute. Sec. 62.09 (7) (d) which provides that 'No city officer shall be interested, directly or indirectly, in any contract to which the city is a party, such contract shall be absolutely null and void and the city shall incur no liability whatever thereon' is, as you will observe, applicable only to contracts to which the city is a party, and has no application to contracts in which a school district is a party. Diligent search does not disclose a similar statutory provision in respect to contracts between members of a school board and the school district."

—The circuit court of Franklin county, Ky., on February 20, issued an order to the state textbook commission to meet for the re adoption of the 80-per-cent list of textbooks now used in the schools of the state. A recent decision of the court of appeals called on the commission to meet and rescind its action of November 16, when bids for books in the 80-per-cent classification were rejected. The court, in its decision, said it was the clear intent of the Howard textbook law to limit adoptions of new textbooks to 20 per cent each two years. In adopting the entire list, the commission gave as its reason that some of the books used were obsolete.



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Strowger engineers will welcome an opportunity of making a survey of any school project calling for any of the products listed below and recommend accordingly.

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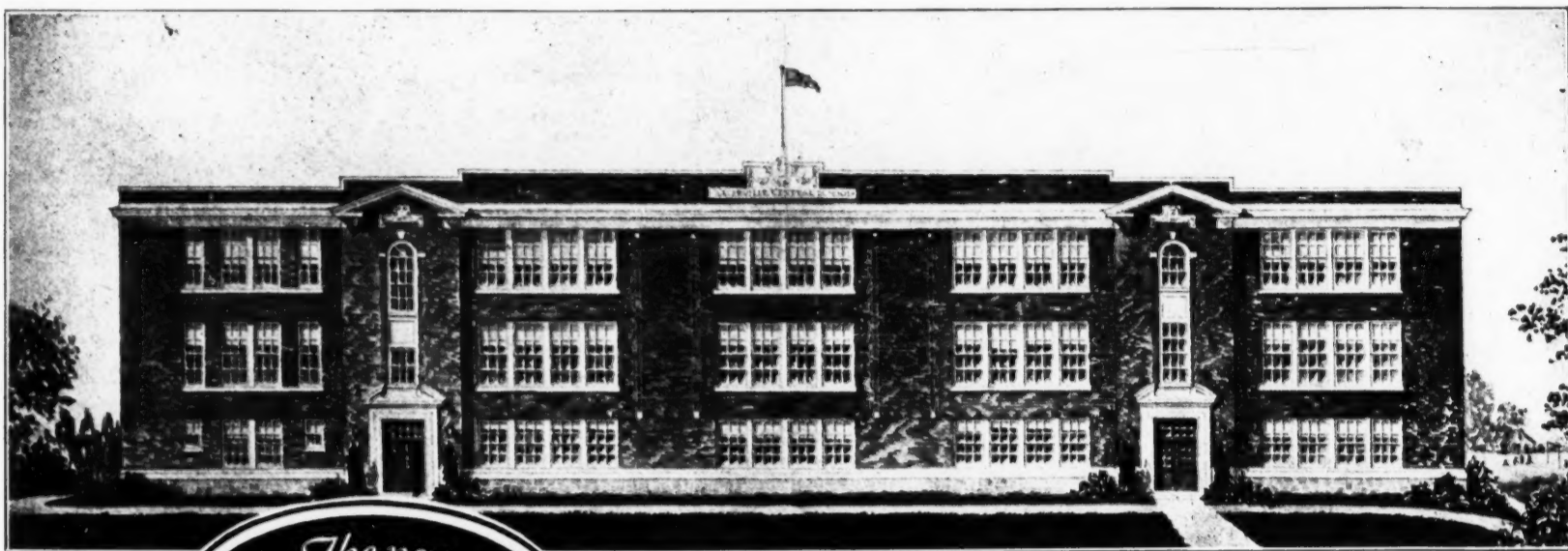
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New High School Building, Waterville, N. Y. Equipped with "SF" Sani-Dri in the washrooms and Sani-Dri Hair Drier in shower room. Architect: Gordon Wright, Syracuse, N. Y. Marjorie H. Wright, Associate.

sets a new standard of cleanliness and efficiency

The new code of cleanliness and efficiency for school washrooms can best be met with the new "SF" Sani-Dri, which does away with unsightly, unsanitary towels, speeds up washroom service and cuts towel costs 60% to 90%. Equip your washrooms with this wonderfully efficient drier. You'll be installing continuous drying service—ready for use every day for years, regardless of the budget.

At the N. E. A. Convention

Interest at the N. E. A. Exhibit in Atlantic City was focused upon the greater speed, faster air flow and full mischief-proof construction of the new "SF" Model—characteristics which make this new drier an outstanding development for school washroom use.

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Chicago Hardware Foundry Co.

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Chicago Hardware Foundry Co., ASBJ-4-30
Electrical Division,
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WASHINGTON CORRESPONDENCE

A. C. Monahan, Formerly U. S.
Bureau of Education

DEPARTMENT OF SUPERINTENDENCE

Approximately 13,000 people registered at the recent meeting of the Department of Superintendence of the National Education Association, held at Atlantic City, February 22 to 28. This does not include a large number of members of families attending who took the occasion to visit this noted resort. About 4,000 superintendents of schools—state, city and county—are included in the total given above. This makes the Atlantic City meeting one of the largest ever held by the Department.

San Francisco is prominently mentioned as the place of the 1931 meeting. The selection rests with the executive committee, and is made usually at the May meeting of the committee. Invitations have been received by the committee from at least 5 cities, including Minneapolis, Chicago, New Orleans, Toronto, and San Francisco. San Francisco presents as claims for first consideration the fact that the Department has never met in that city, and that the West Coast is very desirous of being hosts to this great educational body; that it has ample hotels, a new theater suitable for the large general sessions; the old auditorium for educational exhibits, and the facilities of the University of California and of the Leland Stanford Junior University for meetings which prefer to be at these great institutions.

The members of the executive committee, which selects the place for the meeting, are the following, these being the newly elected officers of the Department:

Norman R. Crozier, superintendent of schools, Dallas, Tex., President.

Frank Cody, superintendent of schools, Detroit, Mich., First Vice-President.

Daniel S. Kealey, superintendent of schools, Hoboken, N. J., Second Vice-President.

Sherwood D. Shankland, Washington, D. C., Executive Secretary.

Frank M. Underwood, district superintendent of schools, St. Louis, Mo., Member.

Paul C. Stetson, superintendent of schools, Dayton, Ohio, Member.

Daniel E. Weglein, superintendent of schools, Baltimore, Md., Member.

C. B. Glenn, superintendent of schools, Birmingham, Ala., Member.

Reorganization of the U. S. Office of Education

The reorganization of the Office of the Department of the Interior, known as the U. S. Bureau of Education for over 60 years, as the U. S. Office of Education, announced several months ago in the JOURNAL, has now been accomplished. During the past month, personnel and furniture has been shifted from room to room so that each new division is assembled in its unit. The Office is now in these six major divisions:

A. Administrative, under the direction of the Chief Clerk, Mr. L. A. Kalbach (including housing, routine, Indian and Alaskan schools).

B. Education research and investigations, under Miss Bess Goodykoontz, newly created assistant commissioner of education.

C. Publications, under the editor-in-chief, Dr. H. R. Evans, acting.

D. Library Service, under the chief librarian, Miss Mabel R. McCabe, acting.

E. Educational Service, under the chief of educational service, Mr. L. W. Alderman.

F. Major educational surveys, under the commissioner, Dr. Wm. John Cooper.

Under Division F there are five subdivisions:

1. Collegiate and professional schools, Dr. A. J. Klein, chief.

2. American school systems, Mr. Walter S. Deffenbaugh, chief.

3. Special schools and educational activities, Miss Katherine M. Cook, chief.

4. Foreign school systems, J. A. Abell, chief.

5. Statistical service, Mr. M. A. Proffitt (acting).

It is expected that permanent chiefs for the library and editorial divisions will be made soon.

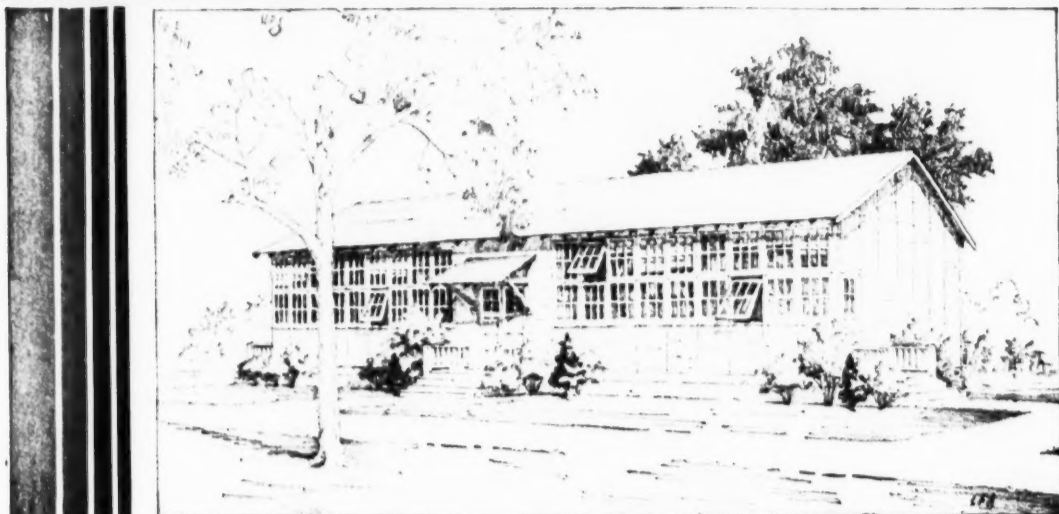
Civil service examinations for these vacancies were held in February and March, respectively.

Miss Katherine M. Cook, who is now chief of the subdivision having to do with special schools and educational activities has been chief of the division of rural education since 1920. Previous to that she was a specialist in Rural Education in that division. The division of rural education, organized in 1911, is discontinued, the work being absorbed in the new division of American school systems, under Mr. Deffenbaugh. Many will regret the passing of this division as a distinct unit of the Bureau. It was created by Dr. P. P. Claxton early in his administration, from funds appropriated by Congress in the last year of the commissioner-ship of E. E. Brown.

Under the reorganization, the separate section on industrial education also disappears. Mr. Proffitt, who was specialist on industrial education, is now acting chief of the statistical division.

A simplification of the general make-up of the publications of the Office is in progress. The following documents will be issued in the future: Bulletins, pamphlets, leaflets, annual reports, biennial surveys of education, and reading courses. The bulletin series will consist of series of rather permanent interest and value in the various fields of education. They will ordinarily be 32 pages, or over. Pamphlets, ranging usually from 8 to 32 pages, will contain material of less permanent interest. Leaflets will range from 2 to 8 pages. The pamphlets and leaflets will take the place of the various divisional publications formerly listed as City School Leaflets, Commercial Education Leaflets, Health Education Publications (Health Education Series, Physical Education Series, and School Health Studies), Higher Education Circulars, Home Economics Circulars, Home Education Circulars, Industrial Education Circulars, Kindergarten Circulars, Library Leaflets, Rural School Leaflets, Secondary School Circulars, Miscellaneous Publications, Statistical Circulars, and Teacher's Leaflets.

Sections of the biennial survey of education will still be issued in advance of the distribution of the entire volume. They will be listed as "chapters"



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Circle A Schools and Gymnasiums provide attractive quarters for any size of student body—at a reasonable cost and in a very short time. For instance: 4 men erect the one-room school in five days. Other buildings “go up” correspondingly as fast. Circle A walls are insulated—four layers thick. They keep out heat, cold, and noise. Circle A Buildings are reinforced at every three feet and at all four corners. They are truly more rigid than most frame buildings. And, last but very important—Circle A Buildings are handsome substantial structures that can stand with pride in the most expensive company. Send for interesting details. No obligation.



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in the Government list of publications; the bound volume will be listed as a bulletin of the Office of Education. No changes will be made in the annual report of the commissioner of education, or the reading courses. Mimeographed circulars of current educational information will be issued from time to time; they will be announced in periodicals with the other Office of Education publications.

Educational Directory

The annual *Educational Directory* issued by the U. S. Office of Education, will be available early in April.

New Building for the National Education Association

Construction work on the new building for headquarters of the National Education Association at Washington, D. C., has begun. A reproduction of the architect's drawing of this building appeared in the *JOURNAL* for October, 1929. The new building will be directly behind the present one on 16th Street and will be made to conform to it, the two appearing as a single construction.

The new section will be seven stories high, or three stories higher than the present one. In addition to the National Education Association and the Department of Superintendence, the complete structure will house the offices of the National Congress of Parents and Teachers, and the International Kindergarten Union.

The building is financed from the permanent fund of the N.E.A., which is in charge of a Board of Trustees, Walter R. Siders, chairman. Frank Irving Cooper, of Boston, is the architect.

Committee on the School Child of the White House Conference on Child Health and Protection

Forty of the country's authorities on education and health work for school children recently met in Washington to discuss the protection of the health of the child. They constitute the subcommittee of the White House Conference on Child Health and Protection designated the “Committee on the School Child.” The chairman is Dr. Thomas D. Wood, professor of health education, Teachers College, Columbia University, New York.

In explaining the purpose of the committee's work to the members at this first meeting, Dr.

Wood said, “The school is the most influential of all the agencies for a complete contribution to child health. It is the universal, the officially created, and the strategic institution for organizing and directing the health care of the child of school age. The school's responsibility has to do with both prevention and the care of disease. Since the school in its very nature is well constituted to act as a health center, it is also an assembler and a distributor of children's ailments in the community.”

“Independent school systems in a thousand communities, working for a hundred years, have given thought to the health of the child. Innumerable experiments have developed an immeasurable mass of information. Our purpose is to assemble and digest that information, to make it available for the use of the whole conference when it meets. The conference hopes to make the results of our studies, along with those of other committees, available for the use of the whole community.”

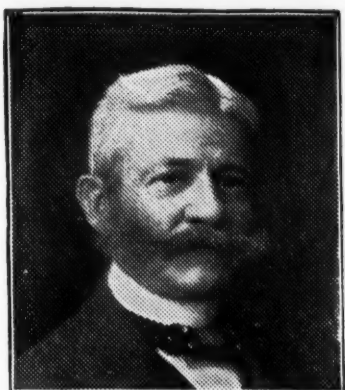
Reports of the Advisory Committee on Education by Radio

The National Committee on Education by Radio has turned over much material, pro and con, to the Office of Education for analysis. In the educational programs that are being broadcast to the schools two afternoons a week, the following are the apparent disadvantages . . . “that it puts sales pressure on school officials; that it is a vehicle of commercial propaganda; both experimental and expensive; that it disrupts and overcrowds the schedule, reduces teaching to mere dial twisting, that it is not properly correlated with the program; insufficient advance information on the program for correlation; that it threatens to bring in mass education and standardized thinking.” The arguments in favor of the use of radio in schools state that “it enriches the curriculum and broadens the students' viewpoint, awakens healthy curiosity, stirs ambition, vitalizes instruction and adds variety to it; that it increases appreciation of the subjects studied by supplying personality and authenticity not felt by young people in textbooks, that it gives the teacher new plans and ideas, and an opportunity to observe her pupils' reaction to another stimulus

than her teaching, and that above all the arguments of those not in favor of broadcasting educational programs to school children are those used against any experiment, who will not wait until the art is learned before expecting perfection.”

Getting over educational programs to the adult is found to be another and more difficult matter. In the first place, “the adult frequently dislikes to find improvement forced upon himself. Talks by radio are held to be founded on the false premises that listening means acquiring education, when there is really no stimulus to logical thought. They feel that there is no proven technique, and no way to check up to acquire one; that the listener loses the aid of maps and other means of visual instruction; of group discussion and the stimulus of the teacher's presence . . . while the people in favor of adult education by radio argue that the broadcast democratizes American education. It removes the prerequisites of previous academic training, social status, and economic freedom. It also removes barriers as age, color, race, and creed. It multiplies the reach of the endowment dollar by the elimination of the expensive halls and dormitories in which it is otherwise spent. It is the swiftest means for the spread of ideas and increases the public appreciation of education, thereby raising the cultural and educational standards of the nation. And, far from injuring educational institutions, it stimulates parents and their children to a realization of the value of education, gives them intellectual ambition, thereby increasing enrollment in educational institutions.”

—Less than 13 per cent of the day-school teachers employed in cities throughout the country during the academic year 1927–28 were men, according to data compiled by the U. S. Office of Education. The data which covered all cities with a population over 2,500, indicated that the total population of such communities was 54,885,777. The total number of teachers in the day schools of these school systems—2,885 in number—was 361,314, of whom 45,413 were men, and 315,901 women. During the two years ending in 1928, the regular day-school population rose from 11,714,231 to 12,273,412 boys, an increase of 4.8 per cent.



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The extreme hardness and toughness of Alundum abrasive, the basic material in Alundum tiles, assures permanence. They stand up and remain non-slip under the most severe traffic conditions. And they have no grooves nor corrugations to encourage tripping.

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Superintendents

—Supt. ROBERT GOETZ, of Silverton, Oreg., has been reelected for a new three-year term, with a substantial increase in salary. Mr. Goetz was recently given a scholarship by the Commonwealth Fund of New York to study health education at Harvard University this summer.

—Supt. R. L. JONES, of Memphis, Tenn., has been given a new four-year contract for the school year 1930. During Mr. Jones's eight years of service, 125 grammar schools, three senior high schools, and one junior high school have been erected, as well as five buildings for colored pupils.

—Mr. McCALL ALDRICH, superintendent of schools at McGill, Nevada, has been reelected for another year, at a salary of \$5,750. Mr. Aldrich is a graduate of Northwestern University and holds a master of arts degree given by Teachers College, Columbia University.

—Supt. J. G. MOORE, of Fargo, N. Dak., has been reelected for his tenth consecutive year, beginning with August 1.

—Supt. NICHOLAS GUNDERSON, of Sparta, Wis., has been reelected for another year.

—Supt. O. W. LASATER, of Corvallis, Mont., has been reelected as head of the Corvallis Consolidated School for a third term.

—Supt. E. D. MERRIMAN, of Buckley, Wash., has been reelected for a one-year term.

—Dr. ALBERT B. MEREDITH, commissioner of education for Connecticut, has announced his resignation to take effect August 1. Dr. Meredith has accepted the position of professor of educational administration in the school of education of New York University, where he will have charge of a department in the graduate division of the school.

—Supt. E. R. VAN KLEECK, of Walden, N. Y., New York's youngest superintendent, has been reelected for the school year 1930, with an increased salary.

—Supt. CHARLES E. DAVIS, of Quanah, Texas, has been reelected for his tenth consecutive year, at an increase in salary.

—Mr. D. B. Wolcott has retired as a member of the school board at Kent, Ohio, after twelve years of service. During this period, Mr. Wolcott participated in an extensive building program involving the building of new schools and additions at a cost of \$500,000. Mr. G. S. GETZ has been elected to succeed Mr. Wolcott on the board. Two other members, who had served for a number of years, were reelected. They are Mr. F. W. BOWERS and Mr. IRA MARSH. Other members are Mrs. OLIVE G. FRANCE and Mr. F. H. MERRELL.

—Owing to a disagreement on policies between the board of education of Elmira, N. Y., and Supt. Harvey O. Hutchinson, two members of the board have requested his resignation. The local press cautions the board not to attempt a change in the superintendency at this time of the year. It also holds that Mr. Hutchinson's work as an administrator is satisfactory.

—F. M. LONGANECKER, for twelve years superintendent of the Racine, Wis., schools has been reelected for another three years. His salary will be increased from \$6,000 to \$6,500, the second, \$7,000, and the third, \$7,500.

—Mr. C. L. LITTEL, of Centralia, Wash., has accepted a professorship in the University of New York. Mr. Littell had been superintendent at Centralia for the past seven years.

—Mr. BURTON H. BELKNAP has been appointed assistant in the rural-education bureau of the New York State Education Department. Mr. Belknep will have charge of general administration and supervisory problems, particularly those of the central districts.

—Dr. CARTER V. GOOD has been appointed professor of education in the University of Cincinnati, to succeed Dr. HARRY S. GANDERS. Dr. Good will teach in the summer school during the second regular term in August and will take up his new

work in September. He is a graduate of Bridgewater College and the University of Virginia, and holds degrees given by Bridgewater College and the University of Chicago.

—Mr. W. W. STEWART has been elected a member of the school board of Belleville, N. J., to succeed Mr. P. J. H. HOLLBERG.

—Mr. C. S. McVAY, formerly superintendent of schools at East Liverpool, Ohio, is now a special representative for Little, Brown & Company in New York state and Pennsylvania.

—Mr. HUGH COLEMAN has been reelected as superintendent of schools at Baker, Oreg., at a salary of \$3,800.

—Supt. G. O. BANTING, of Waukesha, Wis., has been reelected for another three-year term. Mr. Banting has completed ten years of service in the local school system.

—Supt. H. S. WEET, of Rochester, N. Y., has been given leave of absence for two months, from March 1, in order that he may recuperate from a recent illness.

—Supt. T. I. FRIEST, of Wisner, Nebr., has been reelected for another year, with an increase in salary.

—Supt. R. V. PHINNEY, of Larned, Kans., has been reelected for a new two-year term. Mr. Phinney has completed 22 years of service in the Larned schools.

—Mr. R. C. SHEPARD, of Beaverton, Mich., has been elected superintendent of schools at Belding for the coming year.

—Supt. J. J. VAN HOFF, of Verdigre, Nebr., has been reelected for a twelfth consecutive term.

—Supt. A. B. ROWELL, of Glencoe, Ill., has been reelected for another year.

—Supt. J. J. HAGAN, of Rock Island, Ill., has been reelected for a third consecutive term.

—Supt. R. E. COOK, of Everett, Wash., has been reelected for a new three-year term.

—Mr. ROY B. ALLEN has presented his resignation as superintendent of schools at Owego, N. Y., effective at the close of the school term in June.

—Mr. E. D. DENISON has announced his resignation as superintendent of schools at Lake Geneva, Wis., effective on July 1.

(Concluded on Page 82)

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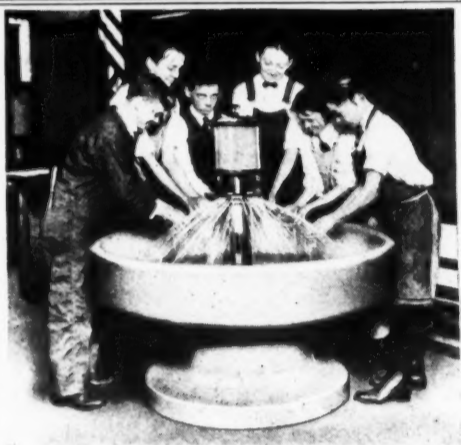
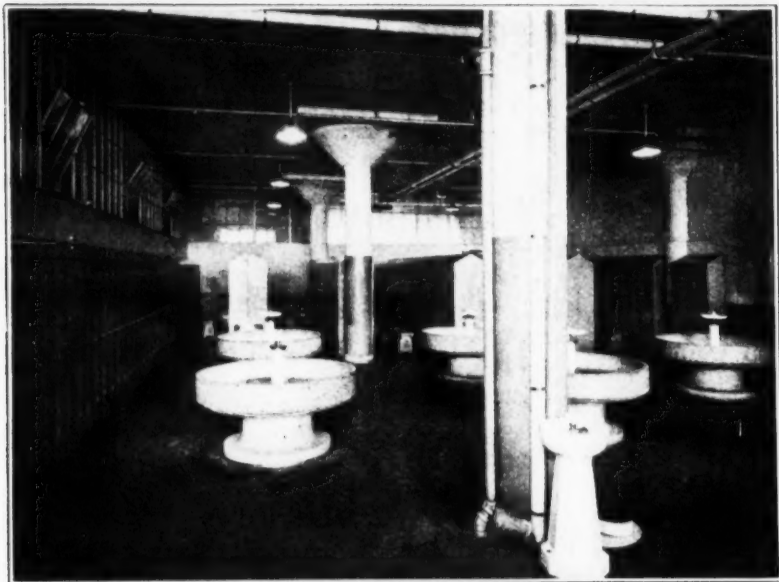
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Notice that each pupil has plenty of room, that the wide bowls and low spray keep water from dripping on the floor.

This modern locker room equipped with Bradley Washfountains is spacious, attractive and yet able to accommodate many more pupils than would be the case with ordinary wash-room equipment.



Ask for the Bradley booklet "MODERN WASHROOM REQUIREMENTS."

Clean, dry washrooms --and 80% Saved on the water bill!

Washrooms equipped with Bradley Washfountains are cleaner, require less janitor attention and always present an attractive appearance. The large illustration shows a typical Bradley-equipped washroom with all modern conveniences.

Bradleys have wide, low bowls that prevent water from dripping on the floor. The patented central spray delivers a strong, full supply of water downward into the bowl of the Washfountain at such an angle as to prevent splashing and yet make the bowl self-flushing. That is why Bradleys stay so clean. No standing water can collect in the bottom of the bowl because of the central drain opening (an exclusive Bradley feature).

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Made in several styles, sizes and colors, Bradley Washfountains meet any washroom requirement. Leading schools all over the country are installing this newest washroom equipment—to render washrooms less expensive and make keeping clean a pleasure instead of a duty for the children. Children like to wash at a Bradley Washfountain.

Ask for full details. Roughing-in measurements and plans supplied on request.

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MILWAUKEE, WISCONSIN

BRADLEY WASHFOUNTAINS

—SUPT. L. A. BUTLER, of Grand Rapids, Mich., has been reelected for a three-year term, at a salary of \$12,000 per year. Mr. Butler will have completed six years of service in the Grand Rapids schools at the close of his present term in June.

—J. E. BOHN has resigned the high-school principalship of Fremont, Ohio, to become principal of the high school at Ashland, Ohio.

—S. E. STONE was reelected superintendent of the Miami, Ohio, township schools at an increase of \$300. This will make his salary \$2,400.

—E. P. ROSENTHAL resigned the superintendency at Oconto Falls, Wis., to accept the superintendency of the Oconomowoc, Wis., schools.

—F. F. ROWE was reelected superintendent at La Grange, Ga.

—J. E. MARTIN has been reelected for a two-year term as superintendent of the Brookings, S. Dak., schools.

—The school board of Merrill, Wis., reelected GEORGE F. BROOKS superintendent of schools.

—W. A. ANDREWS, of Buffalo, Minn., was chosen superintendent of schools at Lake City, Minn.

—G. E. USHER, for the past four years superintendent of schools at Fitzgerald, Ga., tendered his resignation.

—C. E. TANTOR has resigned the school superintendency of Salida, Colo.

—SUPT. ROY M. ANDREWS, of Del Rio, Tex., has been reelected for a new two-year term.

—SUPT. M. E. JOHNSON, of Dodge Center, Minn., has been reelected for a second term, with a substantial increase in salary.

—J. J. KEYES was elected temporary superintendent of the Nashville, Tenn., schools at a salary of \$7,200. He succeeds H. C. Weber, who resigned.

—GAYLORD WILSON GREENE was reelected for two years superintendent of the Anacortes, Wash., schools. His salary was increased by \$100, making the total \$4,300 a year. He is finishing his third term as superintendent. He holds B.A. and M.A. degrees from the University of Washington.

—In speaking of FRANK CODY, superintendent of the Detroit schools, Charles L. Spain says: "Mr. Cody, who is an upstanding, robust specimen of humanity, perpetually radiates good cheer, friendli-

ness, and good will. He gives little thought to the implications of official dignity. Most people who know him call him Frank, and this includes the members of his official family. He does not take his job, himself, or anyone else too seriously. He is an active member of the Don't Worry Club, and he is blessed with a keen sense of humor which brightens the corner wherever he is and helps him over what some superintendents might consider real troubles."

—S. C. DENNIS was reelected superintendent at Toronto, Ohio. He has completed 14 years of service as superintendent.

—ALBERT M. BEAN has been appointed superintendent of the Camden county, New Jersey, schools to succeed Charles S. Albertson, who had served in that office for forty years. He was the city superintendent of Gloucester, N. J., before assuming the county superintendency.

—SUPT. WILLIAM J. O'SHEA, of the New York City schools, has submitted a report showing the accomplishments of his first term in office. The New York World in comment on the report says: "Dr. William J. O'Shea has earned reelection as Superintendent of Schools. There are many problems in the school system still to be studied—many changes to be effected. In the carrying forward of this work an educator experienced in office is needed. The board of education can meet the present situation best by reelecting Dr. O'Shea."

—SUPT. L. F. HAMILTON was reelected at Bladen, Nebr.

—The school board of Cranston, R. I., has increased the salary of PRINCIPAL CLARENCE W. BOSWORTH, of the high school, to \$4,200 with a view of retaining his services.

—C. HARRY HEDBERG, has been reelected superintendent of the Rush City, Minn., schools. He has served Rush City for the past five years.

—J. E. BRYAN has been reelected superintendent of schools at Bessemer, Ala., for a period of three years.

—At a dinner given by the Schoolmaster's Club of Cincinnati, Ohio, the modern school superintendent was characterized as a city builder. Supt. Edward D. Roberts was introduced as "the architect and building contractor of the future city."

(Concluded from Page 80)

—SUPT. EMIL ESTENSON, of Buhl, Minn., has been unanimously reelected superintendent with an increase in salary. Mr. Estenson came to Buhl in 1928 from East Grand Forks, Minn.

—SUPT. M. C. LEFLER, of Lincoln, Nebr., has been unanimously reelected for a three-year term beginning September, 1930. Under the new contract which the board of education has tendered Mr. Lefler, he will receive \$8,500 a year for two years and \$9,000 for the third year. Included in his contract is transportation for two educational conventions each year outside of the State of Nebraska.

—MR. O. S. MAUSETH has been reelected superintendent of the Elbow Lake, Minn., public schools, with an increase in salary. Mr. Mausest has been superintendent the past two years and during that time a large gymnasium-auditorium has been built.

THE PASSING OF DR. GOWANS

The death of Dr. E. G. Gowans, of Salt Lake City, Utah, on February 5, ended a long career as educator, physician, and jurist. Dr. Gowans died in his office following a heart attack.

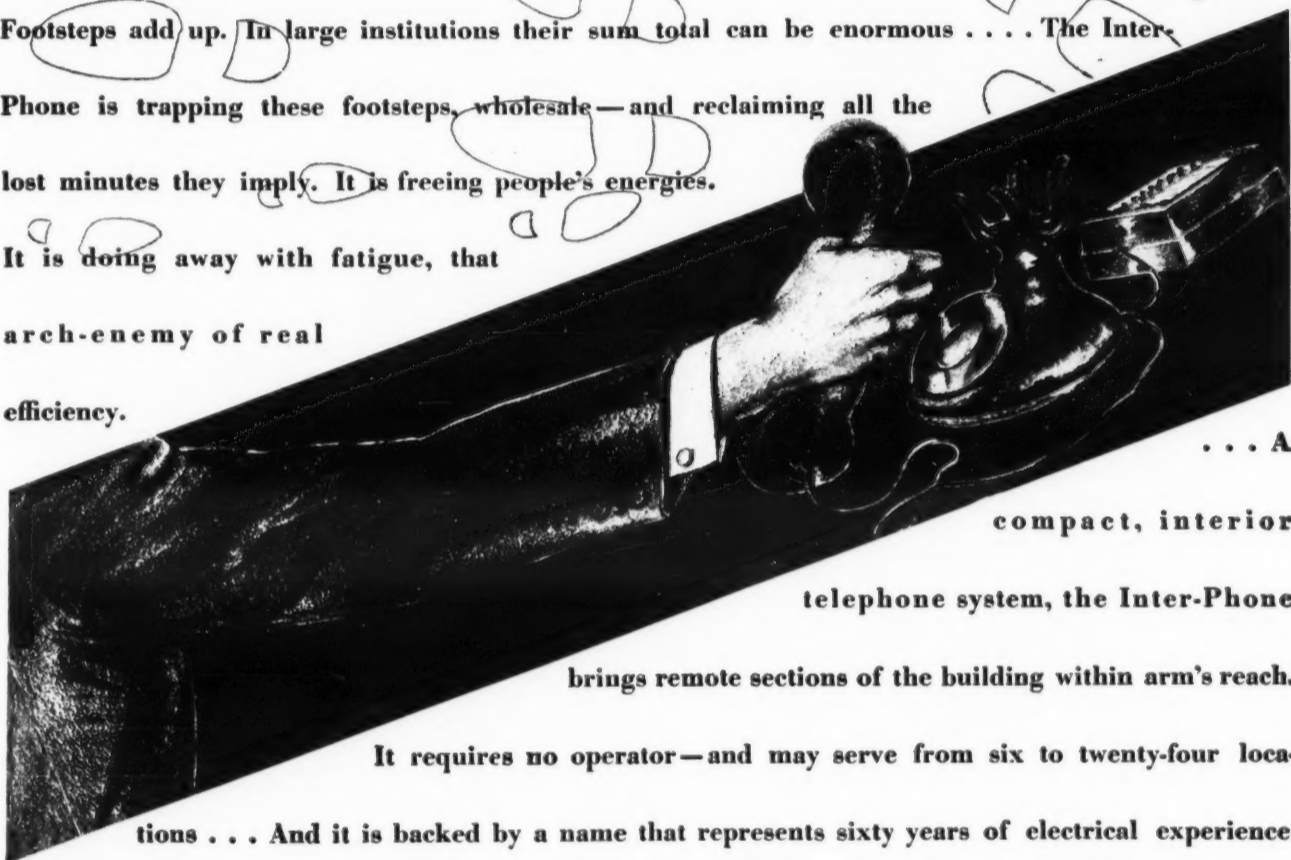
Dr. Gowans was born in Tooele, February 1, 1868, and received his early education in the county schools. He was graduated from the Brigham Young Normal School in 1891. He continued his studies in medicine and in 1894 was graduated with a bachelor of science degree from Brigham Young College at Logan. He then entered the Baltimore Medical College with the intention of entering the practice of medicine and surgery. He took up this work at Mt. Pleasant, but later returned for a postgraduate course at Johns Hopkins University.

Dr. Gowans devoted himself to practice in Salt Lake City, and during the next ten years became judge of the juvenile court, which he held from 1907 to 1909.

As an educator, Dr. Gowans held professorships with Brigham Young University. He served as state superintendent of public instruction from 1915 to 1919, a work for which he had shown ability and experience due to his previous work as superintendent of the Utah Industrial School in Ogden.

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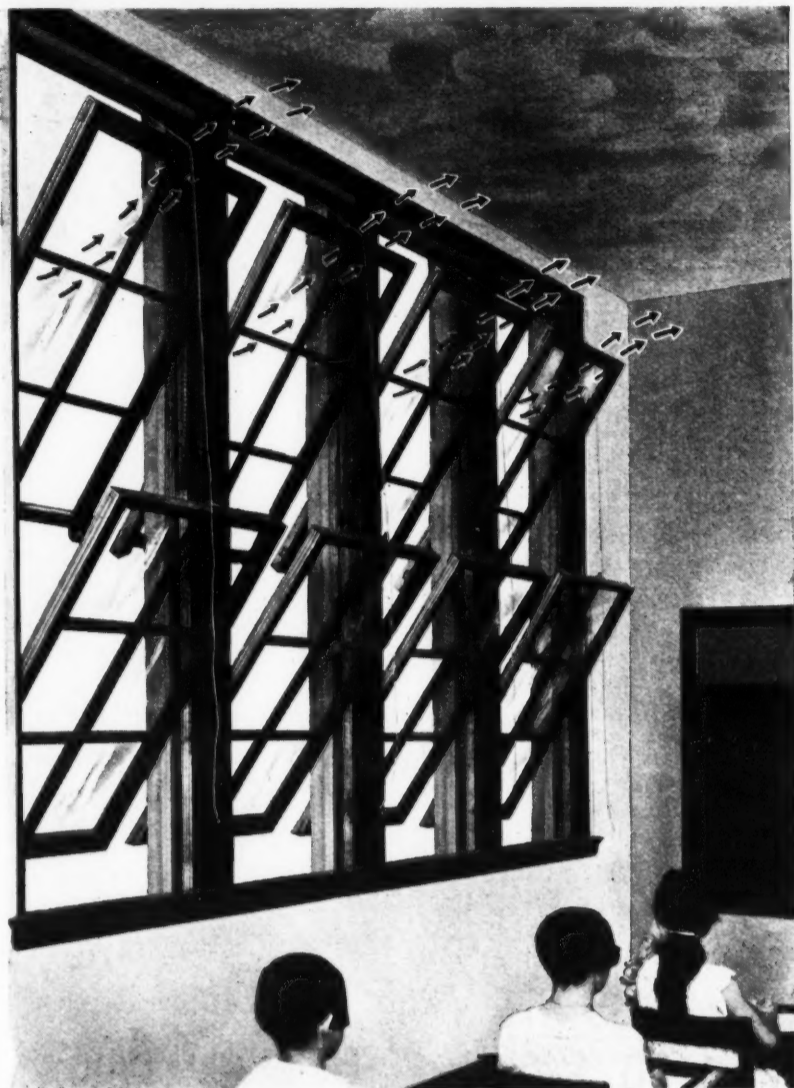
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WINDOW EQUIPMENT**
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Personal News of School Officials

—MRS. ELIZABETH K. BOSTWICK and MR. FRANK B. KELLY have been elected as members of the school board of Pitman, N. J. Both will serve for three years.

—MISS AGNEW M. CRAIG, for several years chairman of the teachers' retirement board of New York, has announced her retirement as presiding officer of the board. MR. C. C. MOLLEHAUER, a member of the board of education and city member of the retirement board, has been appointed to succeed Miss Craig.

—MR. C. R. WHEELER has been appointed a member of the school board at Baker, Oreg., to succeed C. W. Wright, who has resigned.

—MR. H. O. SCHAAF, secretary of the school board of David City, Nebr., was elected president of the Nebraska School Board Association at the close of its annual meeting held at Fontanelle. MR. M. C. LEFLER, of Lincoln, was elected vice-president, and MR. G. R. DODDS, of Superior, was renamed secretary-treasurer.

—MR. EDWIN P. YOUNG, of Towanda, Pa., has been elected president of the Pennsylvania State School Directors' Association, following the close of its meeting held in Harrisburg.

—DR. I. B. BOOTHBY, of Clinton, N. J., has been reelected a member of the board of education.

—MR. DONALD MAXWELL, of Mountinside, N. J., has been reelected to membership on the board for a three-year term.

—MRS. ELIZABETH SEAL and MR. E. J. GESSNER, have been reelected as members of the school board at Dunellen, N. J.

—The school board of Kent, Ohio, has reorganized for the year 1930, with the election of MR. F.

H. MERRELL as president, MRS. OLIVE G. FRANCE as vice-president, and MR. F. W. BOWERS as clerk-treasurer. MR. GEORGE S. GETZ is the new member of the board, elected to succeed Mr. D. B. Wolcott, who resigned after twelve years of service.

—C. A. Dabo is the new member of the Sabina, Ohio, board of education.

—Mrs. C. B. Johnson was elected director of the Meriden, Wash., consolidated school district. John Macauley will represent the Deming district, E. W. Lennart the Everson district, and Peter Jensen the Goschen district. Liberty named George Deeter and Ralfa Steele; Sumas, named L. L. Nimms and Clearbrook chose Oscar Swanson. Dr. Carl C. Hills was elected director of the Custer district.

—F. F. Bergstrom was reelected director of the Mukiltes, Wash., school district.

—J. H. Secrest was elected member of the Longview, Wash., school board.

—H. J. Tilley was reelected school director for Wishkah valley district of Washington. At Aberdeen Gardens, Wash., W. W. Maxey and Lenore Peterman were chosen school directors.

—R. C. Gregory was reelected member of the Puyallup, Wash., school board. He is the president of the board.

—Frederick E. Chapin was elected member of the school board of Randolph, Mass.

—Miss Elizabeth Dean is the new member of the Lynn, Mass., school board.

—Samuel D. Snellings, of Columbus, is the new member of the Muscogee county (Ga.), board of education.

—W. D. Wendt was elected school-board member at DeWitt, Iowa.

—The school board of Port Alleghany, Pa., elected the following officers: President, Mrs. Elton Holden; vice-president, Dr. D. C. Hanna; secretary, Howard C. Herger.

—S. S. Blackman, a banker, was elected president of the board of education of Tullahoma, Tenn.

—Dr. Isaac Miles Wright, school-of-education director at Muhlenberg College, was elected a member of the board of education of Allentown, Pa.

—The board of education of Wooster, Ohio, elected the following officers: President, Charles S. Correll; vice-president, John McSweeney. Mrs. J. B. Patterson is the third member. Wooster has had a board of three members since 1851. The small board has always been satisfactory to the citizens.

—ARTHUR REHM and DR. H. J. HARRIS are the new members of the school board of Marquette, Iowa. They succeed S. F. Krohn and A. R. Ferris who have an honorable record of fifteen years' service on the board.

—The board of education of Nashville, Tenn., began a series of visits to the schools of that city. These visits are made once a week and will continue until all the buildings have been inspected. The physical needs of the schools are noted.

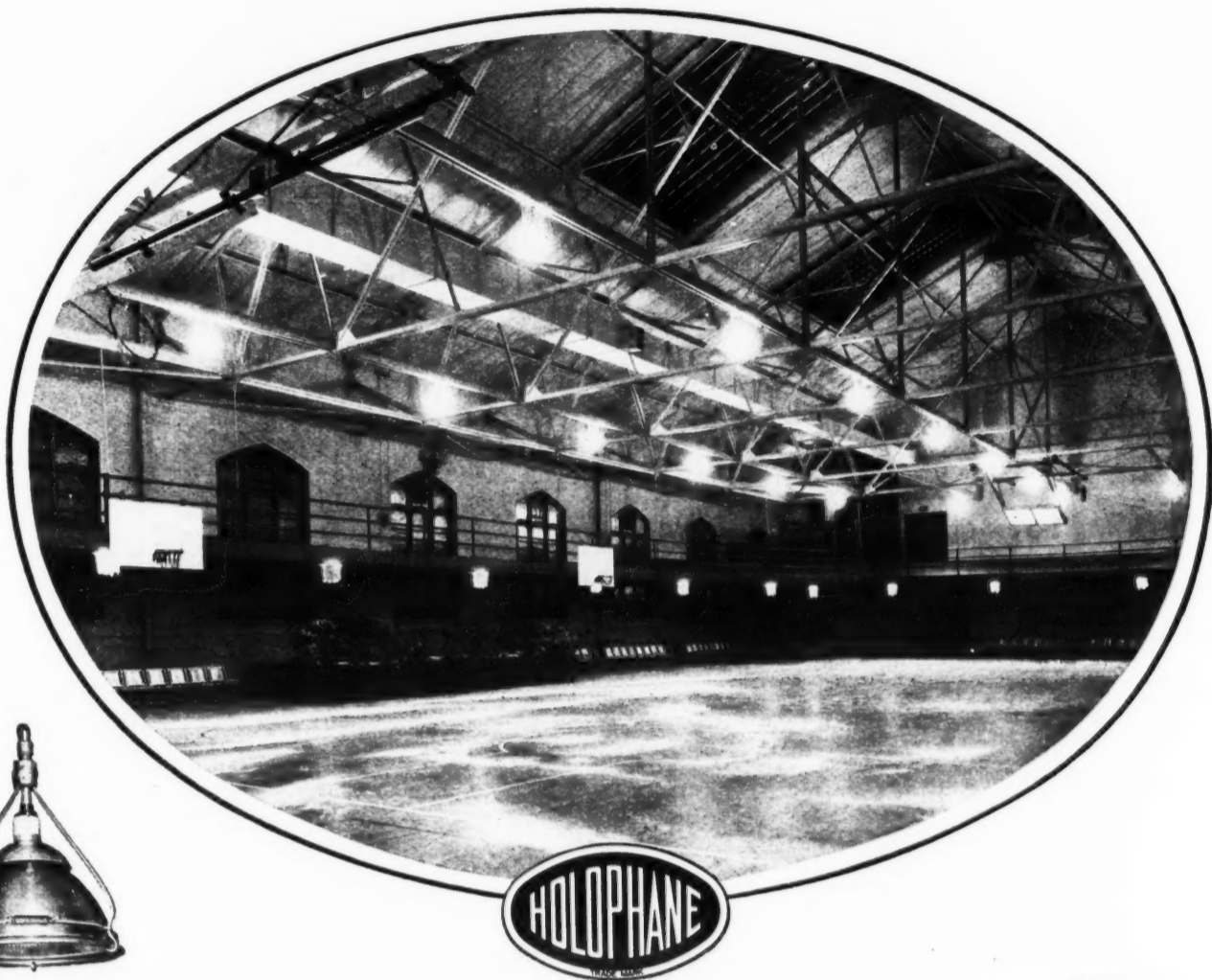
—Joseph Chitwood was reelected president of the school board of Anacortes, Wash., without opposition for a term of three years.

—Massachusetts school-board elections: Watertown, Charles Jewell Brown; Arlington, Clair E. Turner, Denis A. McCarthy; Winchester, Joseph W. Butler, Madge H. Spencer; Southridge, Dr. Armond O. DeGrenier, Leo Renand.

—Thomas R. Cox is the newly elected president of the school board at Englewood, Mich.

—The Nez Perce county, (Idaho), school-board convention was held at Lewiston with a large attendance. Clyde Stranahan presided as chairman. The speakers were Supt. A. L. Parkins, Culdesac; Henry De Young, Lewiston; W. Wayne Smith, University of Idaho, and Miss Margaret M. Sweet, Lewiston Normal School. Better-trained teachers, larger school units, and rural supervision were among the problems discussed.

—SUPT. R. E. TOPE, of Grand Junction, Colo., has been reelected for a term of four years, after having completed 21 years of service in the school system. Mr. Tope regularly spends six weeks as an instructor in the summer school of the University of Colorado, a custom he has followed for several years.



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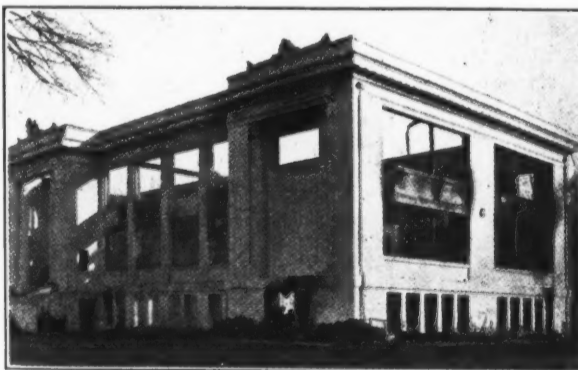
ARE YOUR SCHOOLS SAFE ?

SIX school buildings are attacked by fire every day. Many of these schools are of so-called "fireproof" construction. Statistics show that only 10% of our schools are really fireproof. It is the duty of every school board to provide safe quarters for children and to furnish adequate insurance protection for the property entrusted to their care.

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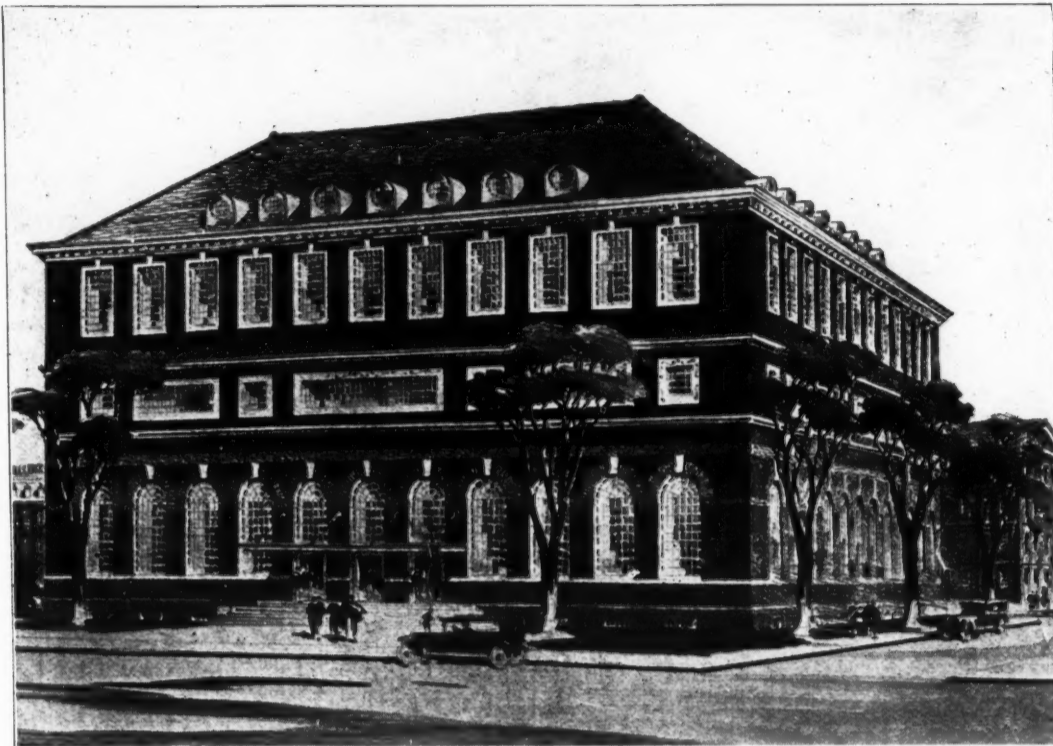
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NEW RULES & REGULATIONS

NEW RULES GOVERNING SCHOOL HEALTH IN SIOUX CITY, IOWA

Upon the recommendation of the school health physician, Dr. E. B. Godfrey, the school board of Sioux City, Iowa, has adopted a new set of rules governing the relation of the school health department to the local health department. The rules were worked out by a committee, of which Dr. Godfrey was a member, and call for the cooperation of principals and school employees in guarding the health of the school children. The rules read as follows:

1. All children out of school four days, for whose absence the principal does not know the cause, or for whom he may suspect illness, or have knowledge of illness, must present a permit from the board of health before they may reenter school.

a) If the pupil has had the attendance of a physician, the physician may make arrangements with the board of health for this permit.

b) If no physician can vouch for the health of the child, the child, with his parent or guardian, should go to Dr. Godfrey at the board-of-health office to secure the permit. In case of emergency, he may be found in his office for fifteen minutes only, from 1:00 to 1:15.

2. If the principal is credibly informed, or has personal knowledge that the cause for absence of the child is in no way connected with illness, it is not necessary for the child to secure the health permit. In this case it is understood that the principal takes the responsibility of the child's entrance.

3. In all cases of four days of absence, because of colds or other diseases not usually regarded with any seriousness, it is thought best for the child to secure the regular board-of-health permit.

4. All permits must be made upon regular board-of-health permit blanks. These permits may be issued by physicians to whom the board of health

has given blanks if the physician has actually been in attendance upon the child. If the child has not had a physician in actual attendance, he should be required to get the permit from the board of health, or have the family physician make an examination and a direct recommendation to the board of health concerning his return to school.

5. Pupils known to have contagious diseases should be reported to the board of health immediately without waiting for the four-day limit.

6. Only those pupils out of school four days or longer whom the principal, or teachers, have reason to suspect are out of school because of some illness, need be reported to the board of health.

7. The names of pupils out of school four days or longer, but for whom the principal has no reason to suspect illness, should be reported to the truant officer, and not to the board of health.

8. If truant officers find pupils are out of school because of any sort of illness, they should report this immediately, both to the board of health and to the principal of the school.

9. The vexing problem of children who come to school on school wagons, or who come from homes in which both parents are working, is handled in the following manner:

a) In case of illness arising in school of the above groups of pupils, the head of the school and visiting nurses should be informed immediately.

b) In case any of the above groups of children return to school without permits, Dr. Godfrey should be called immediately concerning them and instructions received from him as to what should be done in the case.

10. Emergency cases that do not follow any of the above rules should be reported immediately to the head nurse, or to Dr. Godfrey.

11. In addition, all accidents and acute emergencies, should be reported to the office of the superintendent.

NEW RULES ON SUMMER-SCHOOL ATTENDANCE AT MOBRIDGE, SOUTH DAKOTA

The school board of Mobridge, S. Dak., on February 11, adopted new rules governing attendance of teachers at summer schools.

Under the rules, a teacher in order to be eligible to the regular salary increase, must have attended a summer school at least once every three years, where six or more quarter-hours of credit have been earned in the work of the department in which the teacher is employed. Credit for such work must be approved by the superintendent of schools preceding the actual pursuance of the work by the teacher.

A teacher who fails to attend a summer-school session is ineligible to a salary increase until such a time as he or she is able to present proof that such a course has been taken.

Teachers who have reached the maximum salary in the schools come under the same rule, with the exception that attendance is required at least once every four years. Attendance at a summer school is compulsory for those seeking continued employment in the schools.

NEW RULES FOR CUSTODIANS OF SCHOOL BUILDINGS

The school board of Ottumwa, Iowa, has adopted new rules to govern the duties and responsibilities of school custodians in the care and upkeep of school buildings. The rules read as follows:

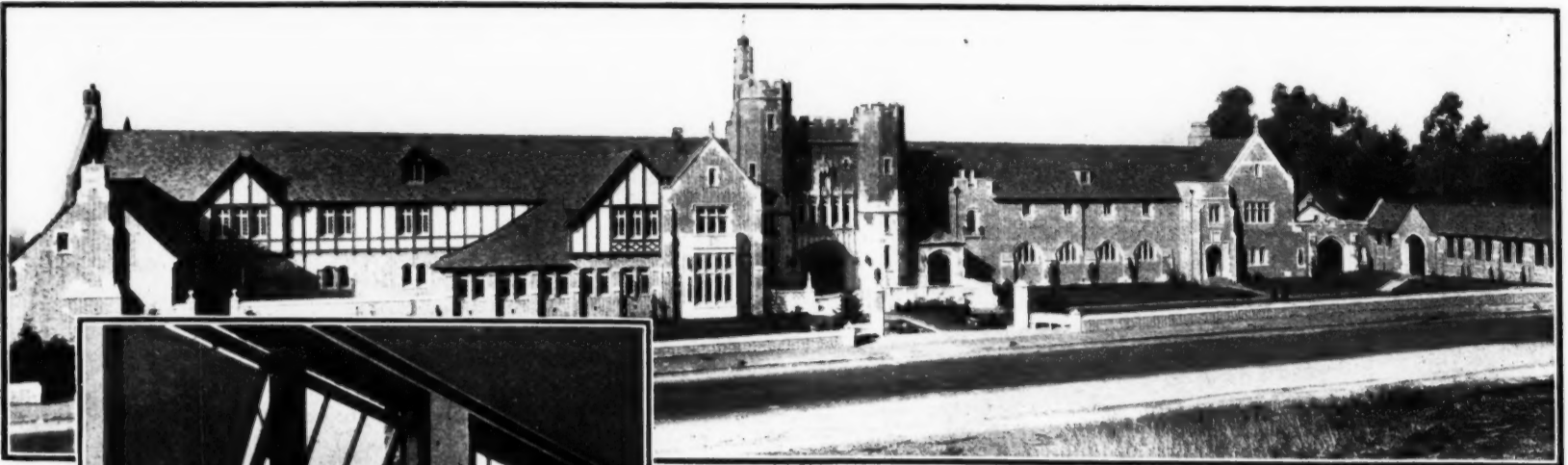
Sec. 1. Custodians in grade-school buildings will be responsible for the faithful performance of their duties to the superintendent of buildings and grounds who, in turn, is responsible to the school board.

Sec. 2. Custodians must remain in, or near, their respective buildings during school hours, unless excused in cases of emergency by the principal of the building. They must not leave the school premises during the noon hour, unless arrangements have been made for some teacher to be in charge during the absence of the custodian.

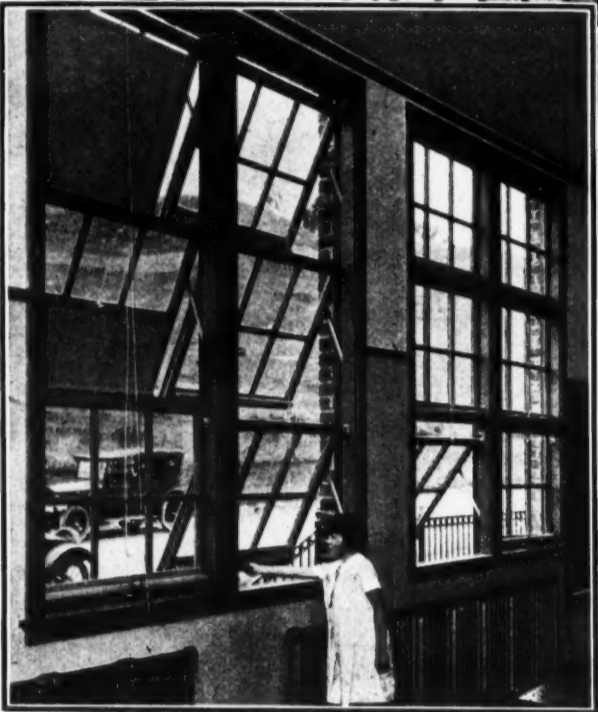
Sec. 3. Custodians must be kind and considerate to the pupils, courteous to the teachers, and must assist the principals in the maintenance of order in the buildings and about the grounds. Custodians must be sworn in as special policemen.

Sec. 4. The use of intoxicating beverages, improper language, or conduct will be grounds for the immediate dismissal of a custodian from the service. Custodians must refrain from smoking in the

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presence of pupils or teachers. They should be reminded that smoking constitutes a fire hazard.

Sec. 5. Custodians must keep all exit doors and windows unlocked during school hours. They shall be kept free from snow and ice, and all obstructions shall be removed from exits and the vicinity of fire escapes. Fire escapes must be kept free from snow and ice, and panic bars on exit doors must be kept in working order. All doors and windows must be locked by the custodian each day before leaving the building.

Sec. 6. Custodians must be responsible for the sanitary condition of the buildings, and must see that all dirt, dust, and odors are eliminated.

Sec. 7. All classrooms, halls, passageways, and anterooms must be swept each school day. Entrance halls and stairs must be swept oftener if necessary. All dusting must be completed before 8:15 each morning.

Sec. 8. During the summer vacation, custodians must thoroughly brush all walls and ceilings, clean the window shades, and brush and clean all steam pipes. Woodwork, including walls, baseboards, doors, doorframes, window sash, and wainscoting must be washed. Glass in doors, transoms, etc., must be washed thoroughly inside and out. All particles of furniture, picture molding, pictures, glass in clocks, etc., shall be cleaned thoroughly. All treated or varnished floors, seats and desks, and the floors of entrances, halls, stairways, and corridors must be cleaned and washed according to instructions furnished by the superintendent of buildings and grounds.

Sec. 9. Windows must be cleaned on the outside as soon as the weather permits in the spring. Custodians must not clean the windows of school buildings on the outside without the use of a window platform or harness provided for that purpose.

Sec. 10. Chairs, seats, and desks should be washed each vacation, or oftener, if necessary. Chairs, seats, or desks used by pupils who have contracted a contagious disease, must be thoroughly washed with a disinfectant furnished by the principal of the building. Doors and doorknobs of schoolrooms, handrails, bannisters, etc., must be washed at least once each month, or oftener, if a contagious disease prevails at any time. Toilet-

room doors must be washed at least once each week, or oftener, if necessary.

Sec. 11. In buildings heated by hot-air furnaces where floor registers are used, the register boxes must be cleaned not less than once each month, or oftener, if necessary. Care should be taken to see that dirt, lint, and paper are not allowed to accumulate around radiators.

Sec. 12. Custodians must keep inkwells cleaned and filled.

Sec. 13. Custodians must keep gas and electric fixtures cleaned and dusted.

Sec. 14. Sinks, washbowls, and drinking fountains must be cleaned each school day. Urinal troughs and slabs, and floors shall be cleaned after each recess period. All closet seats must be cleaned and bowls flushed during school sessions. Urinal troughs, slabs, closet bowls, and closet seats must be cleaned each week. Toilet rooms must be cleaned two or three times a week, or oftener, if necessary.

Sec. 15. Rooms used for cooking classes must be cleaned after each day's use by scrubbing and washing.

Sec. 16. All dusting and cleaning must be done with equipment and chemicals furnished by the supply department. The use of feather dusters for dusting is prohibited.

Sec. 17. Sidewalks must be kept clean and free from dirt and litter. Yards must be kept in a clean

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From between these opposing forces of soft sentimentalism and hard materialism we can climb to a new plane—the plane of a virile, practical, and dynamic idealism. The only kind of freedom that is thinkable today is a discipline freedom. We cannot build our democratic structure on the shifting sands of soft pedagogy. There must be iron in the blood of education and lime in the bone. In the individual, as in the race, true freedom is always a conquest, never a gift.

—William C. Bagley

and safe condition for play purposes, and free from excessive growth of grass or weeds.

Sec. 18. All walks and steps in and around the school buildings must be cleaned promptly after snowstorms. Ice and snow must be removed from entrances, inside walks, and outside walks. Salt or sand should be sprinkled on walks where it is impossible to clean the surface.

Sec. 19. Custodians must perform all necessary repair work on buildings under the direction of the superintendent of buildings.

Sec. 20. In buildings where lockers are used, it is required that these be kept clean and dusted.

Sec. 21. Custodians should anticipate the need of supplies at least a month in advance, reporting their needs to the principal.

Sec. 22. Paints, oils, and varnishes which are highly inflammable, should be kept where they will entail no fire hazard. Oily rags, paper, and rubbish should be collected and burned immediately. Smoking around the premises is considered a fire hazard.

Sec. 23. Custodians must use precautions to avoid fire, and should become familiar with the care and use of fire extinguishers. Water service at the entrance to each building should be closed each night and during vacations. Electric current should also be turned off.

Sec. 24. Custodians in the employ of the schools for a period of twelve months or more are entitled to an annual vacation of two weeks with pay. Custodians with less than one year, or more than six months' service, are entitled to a vacation of one day with pay for each month employed. Vacations may be taken with the approval of the superintendent of buildings after the completion of the regular summer repair work.

Sec. 25. An absence of ten days with half pay will be allowed janitors for illness. A doctor's certificate must be presented for an absence of three or more days.

Sec. 26. The national emblem shall be displayed from the flag-pole on each schoolground during fair weather. It should not be raised during inclement weather. Flags which become soiled or badly torn should be turned in to the supply department, and a new one obtained.

(Concluded on Page 90)



Natural EROSION of water, sand and grit wears away granite rock.

The EROSION which takes place when you mop a floor with water, abrasives and lye is just as destructive. This antiquated, expensive method of ineffective cleaning eats away the very life of your floor.

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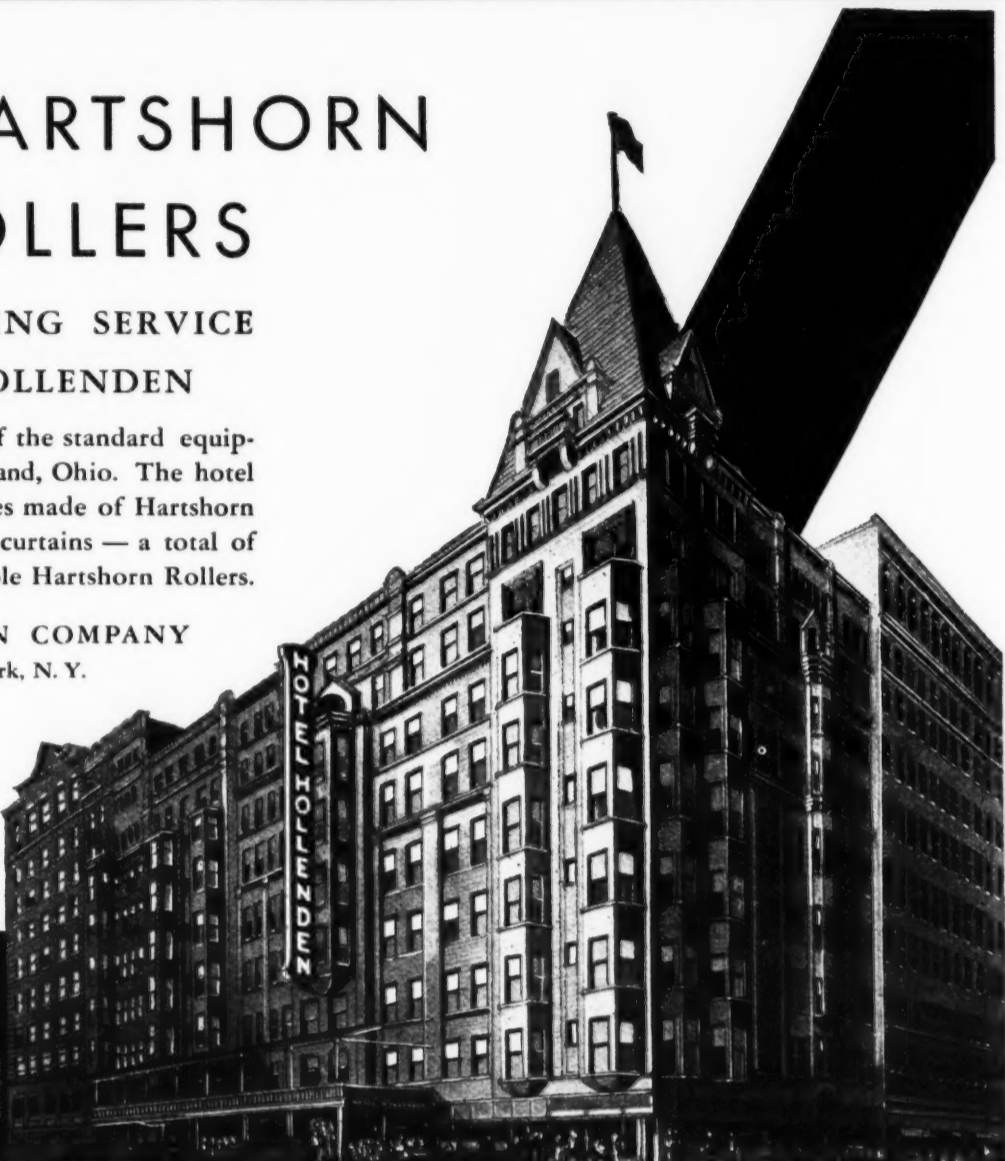
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to help solve your floor problems*

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250 Fifth Avenue, New York, N. Y.



(Concluded from Page 88)

Sec. 27. The boiler room must be kept clean and tidy at all times. Boilers should be blown down two gauges each week. Water columns and gauge glasses must be blown frequently to remove sediment. Safety valves should be tested by hand release once each week. Fires must be kept clean, and the boiler shell and setting kept free from soot. The combustion chamber and the boiler should be cleaned after the dismissal of schools for the summer vacation preparatory to the regular boiler inspection.

Sec. 28. Minor repairs to plumbing and heating plants must be reported to the superintendent of buildings, or to the plumber employed by the board to make repairs.

Sec. 29. Custodians must keep up fires to such a point that the plant will be protected from damage by freezing. All fires should be started early in the morning in order to heat the buildings adequately by the time the teachers arrive.

Sec. 30. All clocks must be kept running and regulated.

Sec. 31. Minor duties in connection with the care of the buildings and grounds must be considered a part of the rules. The superintendent of buildings is authorized to issue such instructions and regulations as he may deem necessary.

REGULATIONS GOVERNING ISSUANCE OF CERTIFICATES TO NEW YORK SCHOOL LIBRARIANS

With recognition of the importance of the work of the school library and the influence of the school librarian have come a demand for higher standards and a realization of the need for regulations for the certification of school librarians.

The following regulations, which have been adopted in New York state, are based on the state plan for the certification of teachers and the suggestions and standards for the training of school librarians of the board of education for librarianship of the American Library Association. The rules which have been approved by the commissioner of education, become effective on August 1, 1930:

Section I. Certificates for School Librarians

There shall be two grades of certificates for school librarians, namely, the school librarian's permanent certificate and the school librarian's limited certificate, which may be issued to applicants having the qualifications hereinafter prescribed.

1. School Librarian's Permanent Certificate

a) *Requirements.* (1) The satisfactory completion of four full years' work in an approved college or university including at least eight semester hours' work in the science of education supplemented by one full year's work in an approved library school or

(2) The satisfactory completion of a four-year course including at least eight semester hours' work in the science of education in an approved college or university in which one year's work is in the field of library science or

(3) The satisfactory completion of a four-year course, with a major in library science, in an approved college for teachers or

(4) The satisfactory completion of a 96-hour course in an approved teacher-training institution with a major in library science included in that course, or a full year's work in an approved library school supplementing a 96-hour course, in an approved teacher-training institution.

b) *Validity.* Such certificates shall be valid in any school in the state.

2. School Librarian's Limited Certificate

a) *Requirements.* (1) The satisfactory completion of 64 hours of the 96-hour course, with a minor of not less than 16 semester hours in library science, in an approved teacher-training institution.

(2) The satisfactory completion of a four-year course, with a minor in library science, in an approved college for teachers.

(3) Applicants who qualify for school librarians' permanent certificates under requirements (1) and (2) except for the eight semester hours' work in education may receive a school librarian's limited certificate and may qualify for a school librarian's permanent certificate by completing eight semester hours' work in the science of education in an approved college or university.

b) *Validity.* Such certificates shall be valid for three years but are not renewable. They may be extended by the commissioner of education upon the application of a superintendent.

3. School Librarians' Certificates of Prior Issue

School librarians' certificates issued prior to August 1,

1930, shall continue in force and be renewable without advancement in grade.

Section II. Validation of Teachers' Certificates for School Library Service

1. *Temporary validation.* The holder of any college-graduate certificate or special permanent teaching certificate valid for high-school grade may qualify for a validation to serve as school librarian by completing 16 semester hours' work in library science in an approved college or library school. This validation shall not exceed three years but may be extended by the commissioner of education.

2. *Permanent validation.* The holder of any college-graduate certificate or special permanent teaching certificate valid for high-school grade may qualify for permanent validation to serve as school librarian by completing one year's work in library science in an approved college or library school.

RULES AND REGULATIONS

—The board of education of Westwood, N. J., has adopted a rule to bar all nonresident pupils whose tuition is not paid up.

—At Youngstown, Ohio, Superintendent Richeson has announced the rule to abolish all paddles employed in inflicting corporal punishment. A teacher was recently arrested for "paddling" a pupil with a thick planklike paddle. Superintendent Richeson believes that corporal punishment should be employed in rare instances only.

—The St. Louis, Mo., board of education has amended the rule relating to the bonding of its superintendent. The rule now reads: "The superintendent of instruction shall have charge of the department of instruction and conduct same in accordance with the act creating this board. For the faithful discharge of his duties he shall give a bond in the sum of \$25,000 with sureties to be approved by the board."

—The school board of Springfield, Ill., has been asked to approve a change in the rule governing sick leaves, for teachers so that half of the ten days allowed for sick leave may be paid each semester. Under the present plan, the full ten days' pay is allowed only at the end of the school year for the reason that in the past, teachers used the full quota and then left the system.



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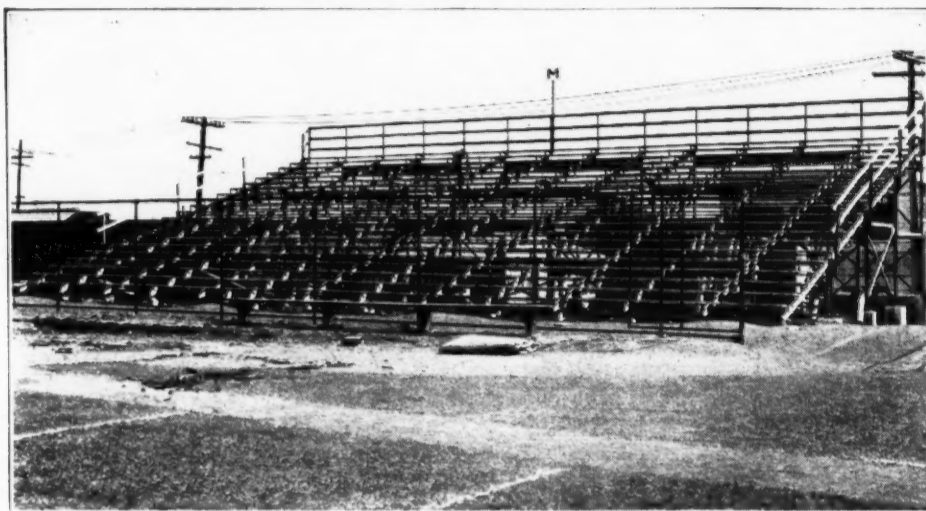
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BUILDING NEWS OF THE SCHOOLS

—The DePadua High School at Ashland, Wis., was dedicated recently.

—Bids have been received for the construction of the National Education Association Building at Washington, D. C. The building will be erected at a cost of \$400,000.

—The Armine and Anna Pickett Memorial School and Community Building at Pickett, Wis., was recently dedicated. Mr. R. B. Lane, of Hollywood, Calif., formerly of Oshkosh, who contributed the money for the \$25,000 structure, was the principal speaker. In addition to classrooms, the building contains an auditorium with stage, and a library.

—Pittsburgh, Pa. The school board has tentatively approved a new building program calling for an expenditure of \$3,000,000. The program calls for a total of eleven projects, to include new buildings and additions to existing structures.

—Toledo, Ohio. The board of education has advertised for sale, \$1,750,000 of the \$5,000,000 building bonds recently approved by the voters. The proceeds of the bond issue will be used for the completion of the building program.

—Odebolt, Iowa. The voters have approved a bond issue of \$88,000 for the erection of a high school.

—Leicester, N. Y. The voters have approved a school-bond issue of \$100,000 for school-building purposes. Construction work on the buildings will start early in the spring.

—Dallas, Tex. The school board has asked the city council for permission to float a bond issue of \$300,000 for school building purposes. The board has prepared a program of school-building improvements, which are estimated to cost about \$800,000. The erection of three schools and additions to three high schools are included in the program.

—The school board of Meriden, Conn., has acquired sites for two new elementary schools.

—A \$100,000 bond issue for a new 12-room grade school was carried at Willmar, Minn. This will give Willmar two modern school buildings.

—The board of education of Hannibal, Mo., has taken the initial steps for a new high-school building. A large site is being chosen.

—The city council of Gary, Ind., authorized to the board of education to sell \$190,000 worth of bonds for a new school.

—A building program involving \$275,000 was adopted by the Peoria, Ill., board of education.

—At Rye Neck, N. Y., the board of education authorized the expenditure of \$500,000 for new buildings.

—Two new junior high schools costing \$1,700,000 have been authorized by the school board of Niagara Falls, N. Y.

—Quanah, Tex. The school district has begun the erection of two ward schools, at a cost of approximately \$110,000. With the completion of these buildings, no school building in the city will be more than three years old.

—The school board of Newport Harbor Beach, Newport Beach, Calif., has begun the preparation of plans for a new union high school for the school district. It is planned to include a general shop on the unit plan, to be enlarged as the demand arises.

—Butte, Mont. Upon the suggestion of Mr. J. L. Dorsh, the school board has considered the advisability of carrying blanket insurance on the window panes of the city schools. It was pointed out that the schools were compelled to replace three panes recently, at a cost of \$21, and that the bill for broken windows increases from month to month. The board is awaiting a report on a window survey begun by insurance agents last October.

—Shorewood, Wis. The school board is completing an addition to the Lake Bluff School, at a cost of approximately \$195,000. The building will contain a health suite, dedicated to the memory of Mr. William C. Sieker, late principal of the Milwaukee Vocational School and former health officer for the village of Shorewood.

—Boston, Mass. The school board has allotted an appropriation of \$100,000 for the financial year January 1 to December 31, 1930, to cover the cost of alteration and repair of school buildings and for fire protection for existing buildings.

—Williams, Calif. At a recent school-bond election, the voters approved a bond issue of \$105,000 for the erection of a new school. The building will contain ten classrooms and an auditorium.

—The school-administration building to be erected for the board of education of Cleveland, Ohio, at a cost of \$2,500,000, has progressed to the stage of a set of working plans made by Walker and Weeks, architects.

—The board of education of Salem, Ohio, has completed a \$40,000 stadium seating 3,000 persons. Additional seats to accommodate 2,000 more are being built. A modern lighting system permits night football which has proved successful. The board has added an adjoining township increasing the enrollment about 450. A new junior high school will be erected and the old used for a grade school.

—The new school at Harmon, Ohio, was opened by L. J. Smith, county superintendent, with an appropriate address. Harriet Savage, president of the school board, presided. The presentation was made by Architect J. E. Lewis.

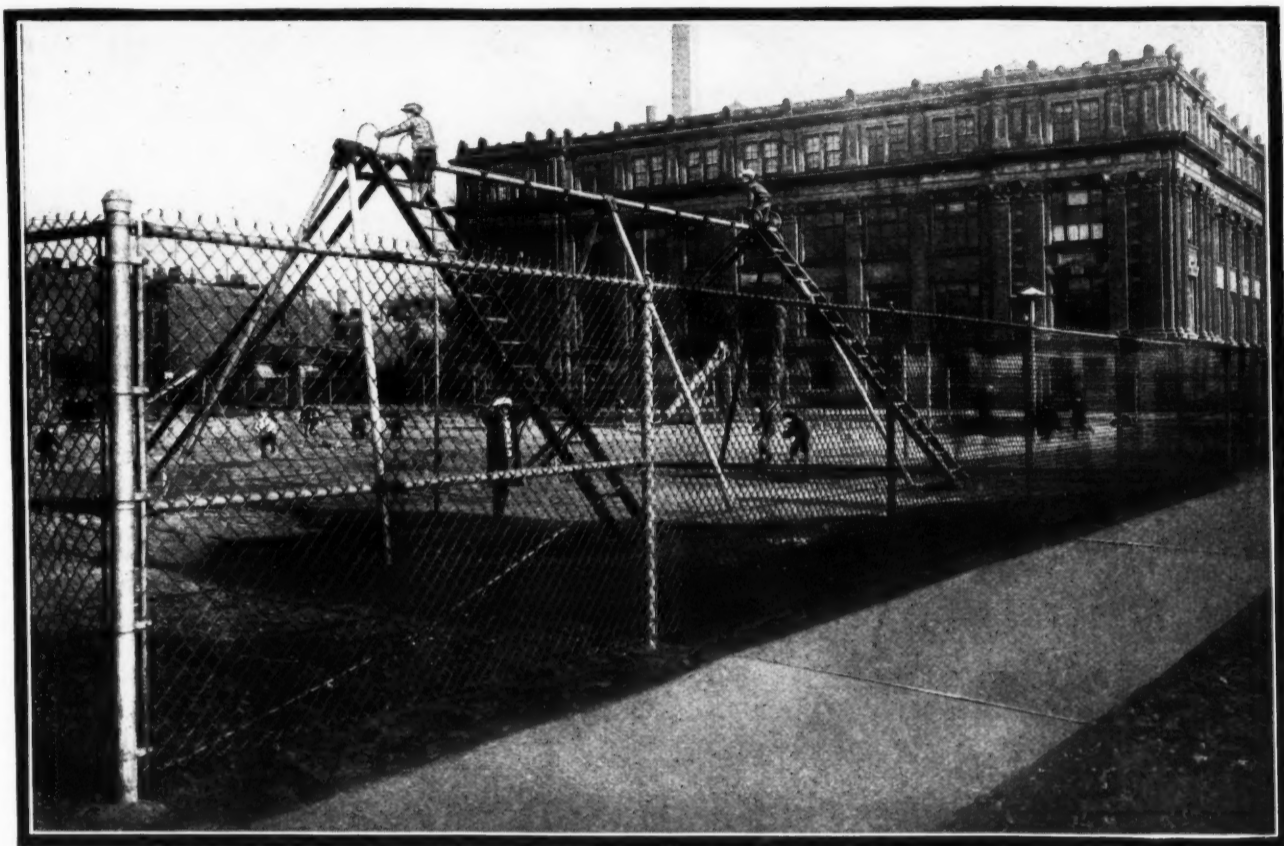
—The new \$130,000 Garfield grade school erected at Olympia, Wash., was formally opened. E. J. Klemme, of Seattle, a pioneer educator of the northwest delivered the dedicatory address. The other speakers were Major Edward C. Dohm, acting president of the school board, and Dr. Lloyd M. Masemore representing the patrons.

—Pittsburg, Calif. The school board has begun work on a school-building program, involving an expenditure of \$200,000.

—The school board of Great Falls, Mont., has named a new school the Largent School, in honor of Mr. S. D. Largent, veteran superintendent, who retired last fall.

—Oklahoma City, Okla. The school board has adopted a budget of \$2,516,068 for the school year 1930-31.

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Nebraska School-Board Association Meets at Omaha

The Nebraska School Boards and Superintendents' Association held its annual meeting February 11-13, at Omaha, Nebr. Mr. J. F. Rohn, of Fremont, presided at the meeting.

Mr. Charles W. Taylor, speaking before the afternoon session of the association on the opening day, made a plea for tax reform in Nebraska to help the state school system. He pointed out that we are rapidly becoming a nation of salaried workers, and that the usual tendency of salary schedules in large business organizations is to sink to a low competitive level held down by financial experts at the top of the economic pyramid working for high dividends on stock issues without sufficient regard to public welfare. This vast and increasing army of salaried people then can only acquire ownership in property through intangible and many times unstable things, known as stocks and bonds, characterized by the terms "absentee control" and the "lack of individual management."

In commenting on the school-tax situation in Nebraska, Mr. Taylor said that in the last ten years the schools have increased about 10 per cent in enrollment. The interest in secondary and higher education has also increased rapidly. He showed that the state university and the state normal schools are supported out of state revenues. While these institutions have more than doubled their enrollment in 10 years, their revenue has hardly kept pace with their growth. If they had enjoyed the same increase in revenues over the ten-year period that the general state government has, they would now have nearly twice as much money to use in keeping up their institutions.

At the closing session, on Wednesday, it was brought out that a reorganization of the state tax system is imperative if the schools in the sparsely settled sections of the state are to be kept on a par with those in the more prosperous localities.

Governor Weaver was urged in a resolution to name a committee to study the problem of new sources of revenue, looking toward a reform of

state-school revenue practice which would tend to equalize educational opportunity.

The tax revision program will be studied by a committee of 93, one member from each county in the state. The committee which is now being formed will shortly be ready for its work. One of the tasks which will confront the committee is the equalization of rural-school district taxes so as to enable the weaker districts to supply as good educational facilities as the more prosperous districts. It was brought out that one of the chief reasons for inequality in revenues is the fact that some school districts have railroads running through them. These railroads are taxed for school purposes, and in some cases the railroad pays a large part of the school tax, thus relieving the property owners. A remedy of the present situation would be to provide a general county school tax, which would be distributed among all the school districts in proportion to the number of pupils.

Announcement was made of the appointment of a committee to undertake a recodification of the school laws, including the school taxation system for presentation to the state legislature.

Mr. Walter I. Black, secretary of the Nebraska High-School Athletic Association, urged group insurance for high-school athletes. "Group insurance," he said, "could be obtained by the boards of education at a rate much lower than individual insurance. It would furnish protection to all those who participate in school athletics. Frequently students are injured whose families are financially unable to bear the burden of such mishaps." The association's new policy in rating officials of contests has proved valuable.

The meeting closed with the election of officers for the ensuing year. Mr. H. O. Schaaf, secretary of the school board of David City, was elected president of the association; Mr. M. C. Leffler, of Lincoln, was elected vice-president; and Mr. G. R. Dodds, of Superior, was reelected secretary-treasurer.

THE NATIONAL ASSOCIATION OF PUBLIC-SCHOOL BUSINESS OFFICIALS

The annual convention of the National Association of Public-School Business Officials will be held May 20-23, at New Orleans. It is expected that the meeting will be an important one, for many matters of particular interest will be discussed.

The research committee, which was appointed two years ago, will present a report of its work, covering the training of school janitors, the care and treatment of floors in schools, the selection, purchase, and storage of school supplies, fire and other insurance for public-school property, and per pupil cost accounting for schools.

An excellent program has been arranged by the president, Mr. C. E. C. Dyson, of Toronto. Among the topics to be discussed are "Superintendents and Business Managers of Schools," by Mr. E. E. Oberholtzer, Houston, Tex.; "What the Layman Needs to Know About Business Management," by Mr. Zeph Hilton, Toronto, Can.; "Vacuum Cleaning," by Mr. H. S. Ganders, University of Syracuse. Architectural problems will be handled by Mr. Harry D. Payne, of Houston, Tex.; Mr. R. P. Dewitt, of Dallas, Tex.; and Mr. I. T. Catharine, of Philadelphia, Pa. Financial matters will be taken up by Mr. W. C. Bruce, of Milwaukee, Mr. Edward Merchant of Philadelphia, Pa., and Mr. N. H. Bilbrough, of Toronto. Mr. H. Giles Martin, of the Delgado Trade School, New Orleans, will describe the work of his school.

SCHOOL-BOARD CONVENTIONS

—The Wisconsin Association of School Boards meets at Racine, on April 11 and 12. The feature of the occasion will be an address by Prof. J. Guy Fowlkes of the University of Wisconsin who will speak on the "Relation of School Board and City Councils." One of the sectional meetings will be devoted to school-board problems in the small community and another will deal with the large city school board. Among those who will actively participate in the program are Supt. F. M. Longanecker, Racine; O. H. Plenzke, assistant state superintendent; E. G. Doudna, secretary teacher's college board of regents; W. A. Taege, Wausau, and O. H. Doxrud, Sparta.



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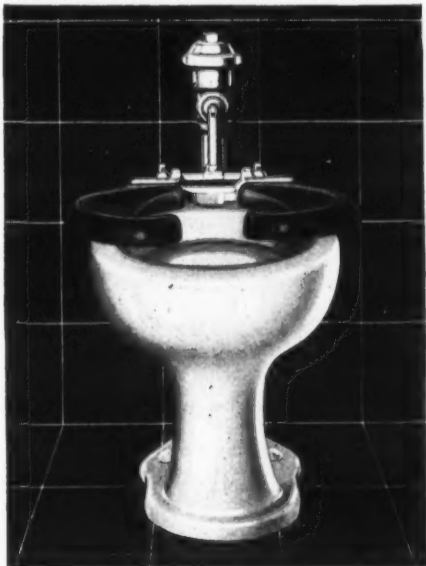
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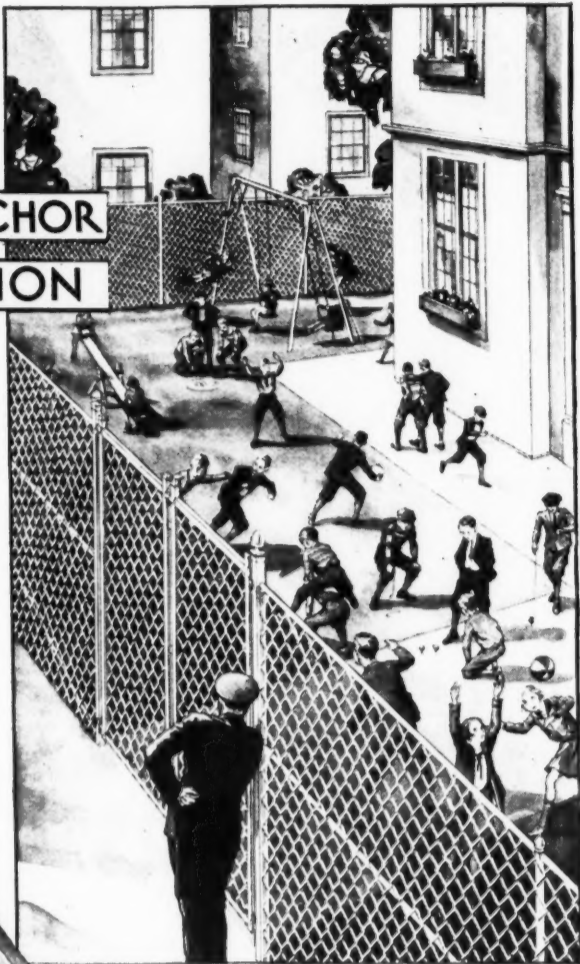
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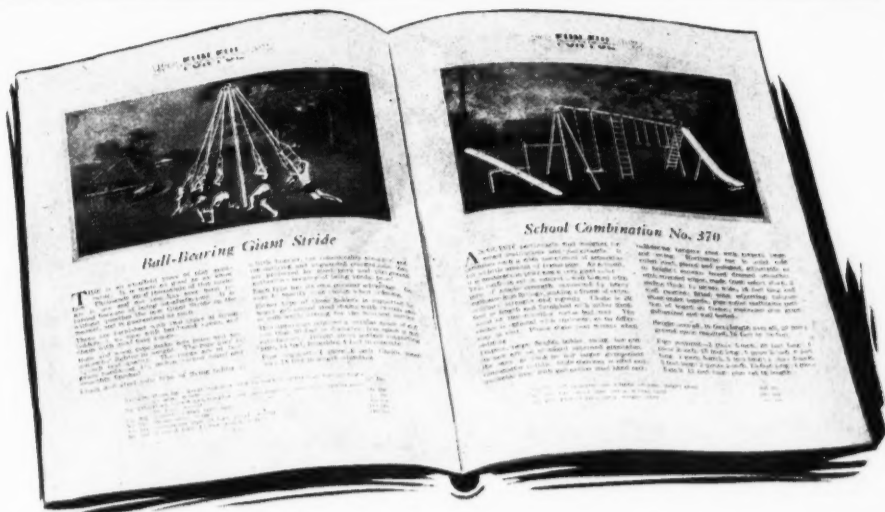
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SCHOOL FINANCE AND TAXATION

COMPARATIVE CITY-SCHOOL EXPENDITURES

"There is an insistent demand on school officials and on research agencies for figures showing the cost of schools in cities. It is natural that boards of education should want some evidence as to the cost of their schools. Budget-reviewing bodies demand statements of expenditures for various educational purposes in comparable cities. A superintendent of schools cannot evade these demands by saying that comparable statistics are not to be obtained; he must obtain some figures on school costs and present them."

This paragraph appears in a bulletin issued by research bureau of the National Education Association devoted to city-school expenditures. The cost per pupil in average daily attendance in full-time day schools is brought out in four classes of cities ranging in population of 500,000 and over, down to cities of 30,000 population and less. In the larger cities the average is \$126.44 while in the smaller it is \$103.18.

In the cities over 500,000 in population which reported, the average cost per pupil in day schools for administration was \$4.49; for instruction, \$97.69; for coordinate activities and auxiliary agencies, \$3.34; for operation of plant, \$11.37; for fixed charges, \$3.92; for maintenance of plant, \$5.63, making a total of \$126.44 for current expenses.

The cities of 100,000 to 500,000 population present the average cost per pupil as follows: administration, \$2.96; instruction, \$82.12; auxiliary agencies, \$3; operation of plant, \$10.47; fixed charges, \$1.90; maintenance of plant, \$5.35; total current expense, \$105.80.

Cities of 30,000 to 100,000 population reveal the following figures: administration, \$3.31; instruction, \$77.72; auxiliary agencies, \$3.33; operation, \$11.08; fixed charges, \$2.05; maintenance, \$4.25; total current expense, \$101.73.

Cities of less than 30,000 population: administration, \$4.24; instruction, \$77.45; auxiliary agencies, \$4.19; operation, \$11.28; fixed charges, \$1.88; maintenance, \$4.14; total current expense, \$103.18.

The report presents the comparative figures submitted by 10 cities of 500,000 population and over; of 52 cities 100,000 to 500,000 in population; of 147 cities 30,000 to 100,000 in population, and 74 cities of less than 30,000 population.

The tables constitute a remarkable array of comparative figures and afford much valuable information. The compilers, however, submit the following caution:

"The science of school accounting has not yet developed to the place where one is justified in using the figures presented in making uncritical comparisons of school costs in one city with those in another. Even the total expenditures for current expense are not comparable for any two cities. When it comes to comparing expenditures for sub-items such as administration, instruction, or operation, the figures are even less comparable. Capital outlay and debt service are accounted for so differently in different cities, and are tied up with municipal finances in such a variety of plans, that figures for these items are likely to be particularly misleading to the uncritical."

"Even if school accounting had reached an extremely scientific and exact stage, so far as methods of classification and mutual understanding of terms are concerned, there are other factors which should qualify any comparisons drawn. Differences in climate, in wealth, in ratio of adults to children, and in educational activities handled by municipalities all have their influence."

HOW THE SCHOOL DOLLAR IS SPENT IN OHIO

Dr. W. J. Osburn, director of educational research for the state education department of Ohio, has presented a report on the results of a study on "How the School Dollar Was Spent in Ohio." Dr. Osburn found that, of each dollar spent for education in the state, 16.01 cents are expended for capital outlay, including buildings and equipment of a permanent nature. Debt service takes 22.68 cents per year, which is used chiefly for the payment of bonds for school buildings and other perma-

nent improvements extending over a period of 25 years. The major part of the school-tax dollar goes to current expenses; to be exact, 61.31 cents. In other words, the main cost of operating the schools is centered on current expenses.

An analysis of the amount spent per dollar for current expenses, shows that one third of a cent is spent for instruction in evening schools. Fixed charges amounts to .36 cents, and general control to 4.34. Maintenance of the school plant and auxiliary agencies take 5.45 and 5.83 respectively. The operation of the school plant takes a little over eleven cents of the current expenditure dollar, which is devoted to janitors' wages, coal, and other similar expenditures. Nearly seventy cents (69.13) of the current expenditure dollar goes to pay for instruction in the day schools. The study indicated that instruction costs ranked first in the public-school dollar expended during the previous year.

THE PROBLEM OF SCHOOL FINANCING IN WASHINGTON

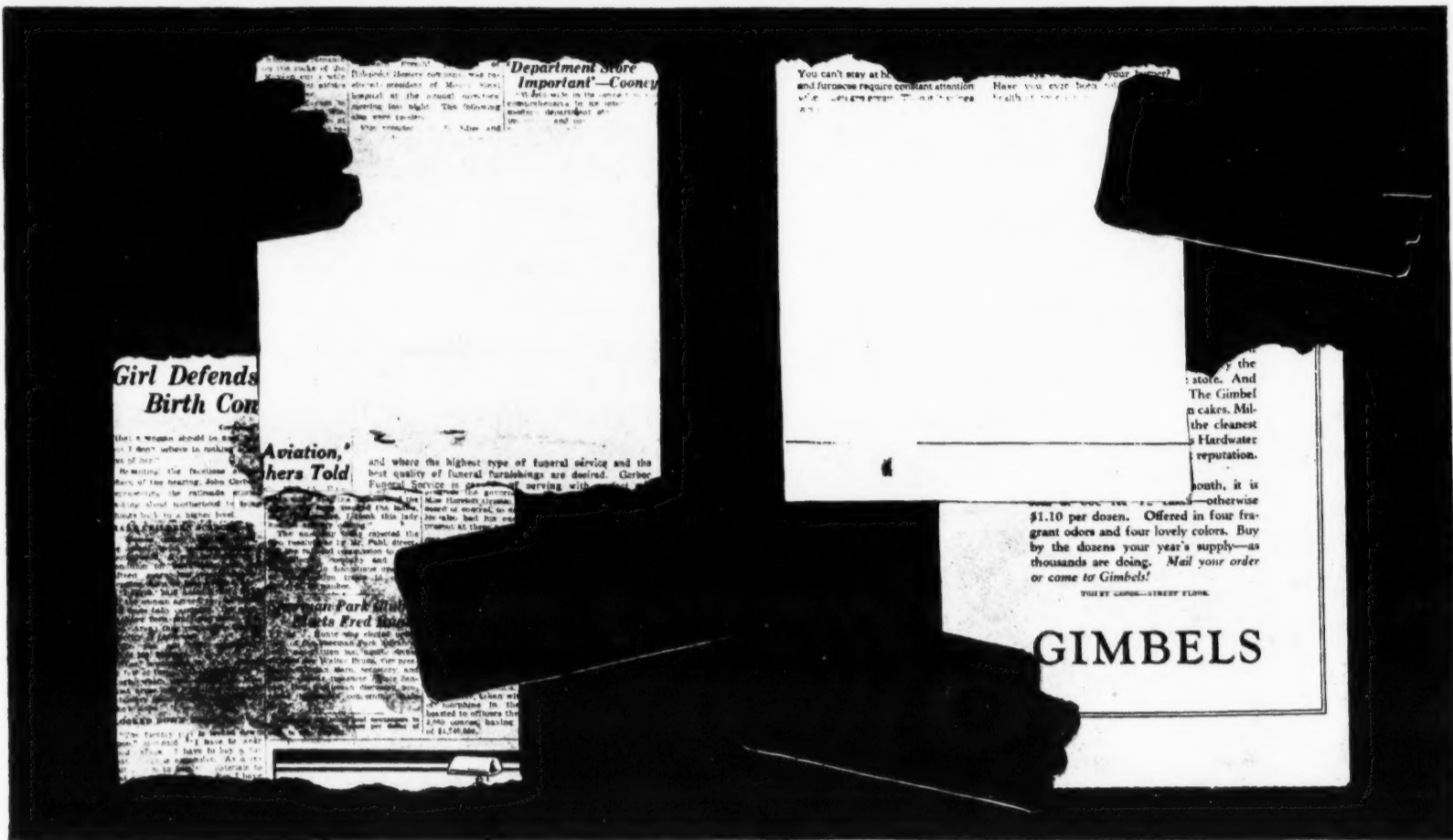
The responsibility for public education is the principle which has been declared a necessity in the treaty of agreement between the several admitted states and the Federal Government.

The State of Washington has placed this responsibility on the individual districts, about 2,000 in number, for the education of its 350,000 children. It is found that there are large accumulations of wealth in areas where there are but few children; on the other hand, there are large numbers of children in locations where the per-capita wealth is small. This creates a variable, both in the quality and amount of education, and also in the just and equitable financial support by the individual taxpayer.

In order to be fair to each child, the state must see to it that conditions are provided which will enable each enrolled child to receive at least an equal educational opportunity. This should be provided on an equal basis — or as near to that as is possible — for all children, whether living in city or country.

Since school revenues are raised almost wholly by direct taxation, the support of each school

(Concluded on Page 100)



Velumina



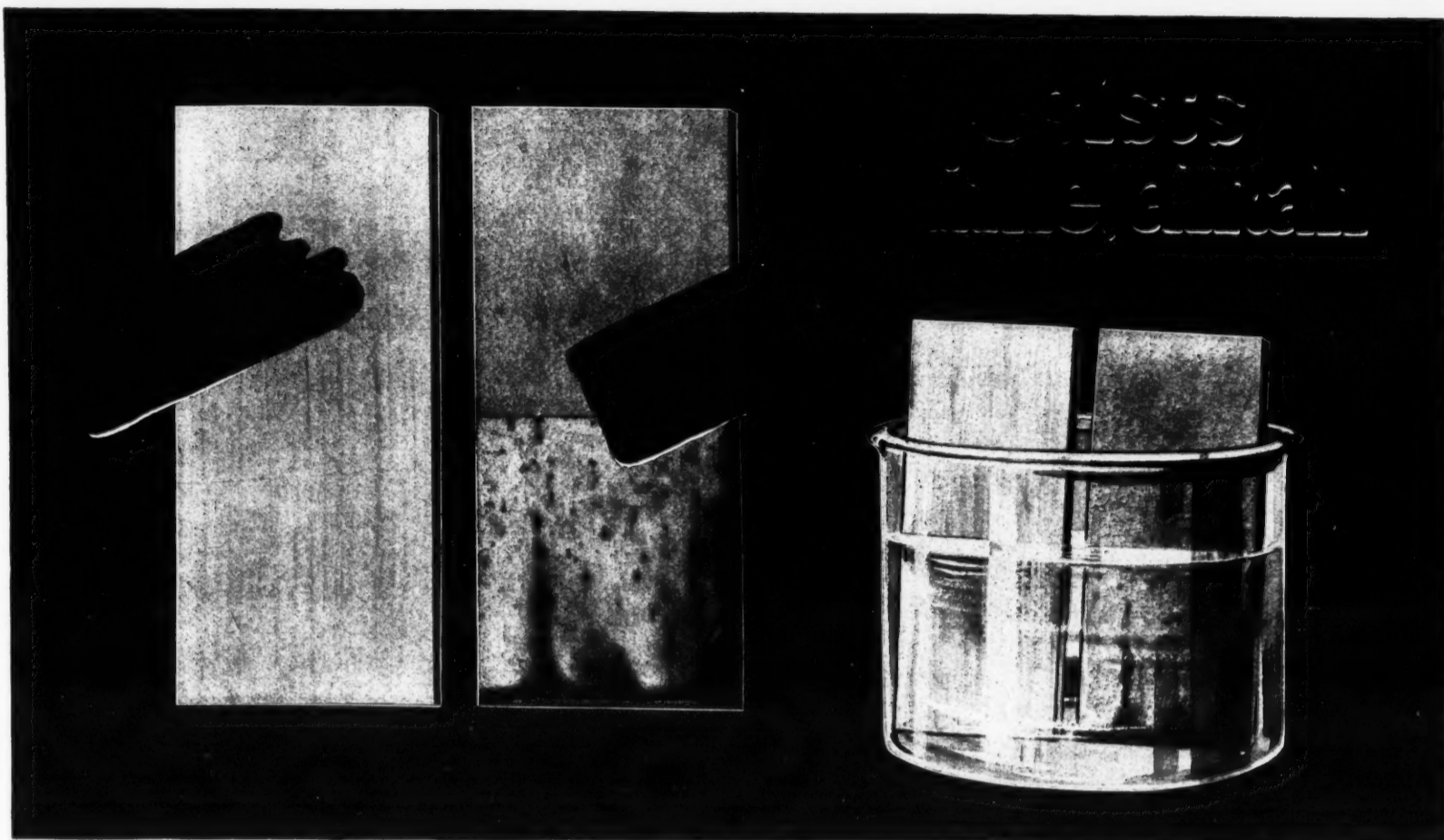
*A*T last advanced paint chemistry "stops the spots" in paint work on plaster! — stops spots caused by unequal absorption of old, porous or low-grade plaster! —more effectually than any other product or material, this discovery *stops the spots* caused by moisture, lime and alkali found in inadequately cured plaster. It's more than a safety factor—it's first aid to hurry-up work, cutting down drying time, and time-waits between coats!

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That's the remarkable outstanding characteristic of this new product—Velumina Wallhide. The illustration on this page shows how it will not even penetrate common porous newspaper. In the same way it holds itself out on porous plaster, holding tenaciously and sealing the surface against moisture, lime and alkali more effectively than any previous accomplishment in spot-stopping!



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But to double proof against trouble use Velumina Wallhide First Coater followed by Velumina Wallhide Finishing Coat. No danger then from skips of

first coater or suction where knobs of plaster have been knocked off!

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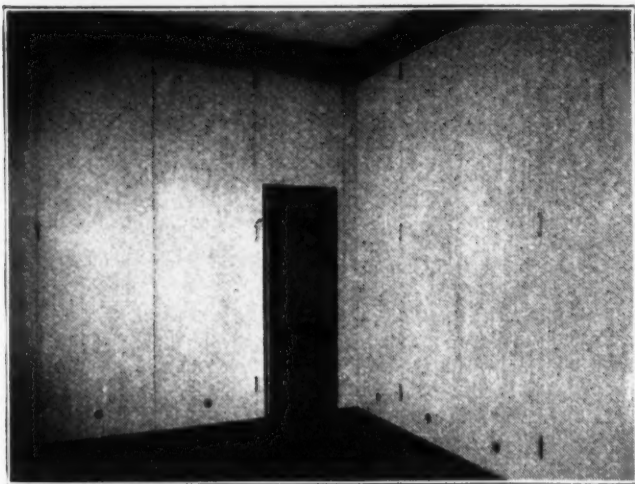
Tintable to soft, beautiful tones by use of oil colors. Both Velumina Wallhide First Coater and Finishing Coat have great hiding quality, delivering quality results in two coats as never before possible!

In its surety of soft uniform tones, in its smooth poreless surface that furnishes poor lodgment for dirt and germs, in its toughness and easy washability, Velumina Wallhide is the economical, suitable wall paint for schools!

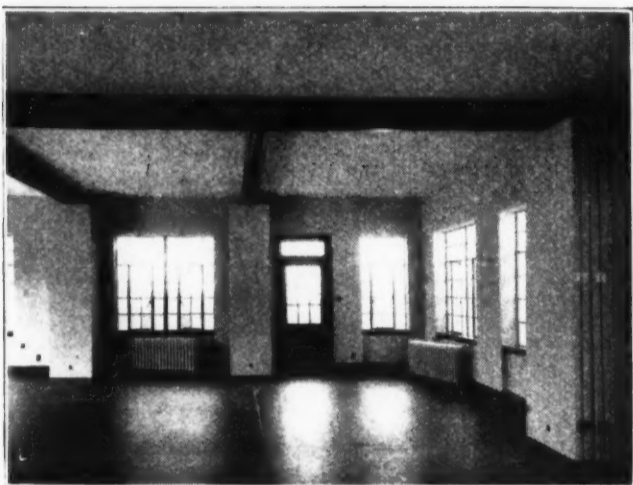
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CIRCLE A FOLDING PARTITIONS

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SCHOOL FINANCING IN WASHINGTON

(Concluded from Page 97)

depends upon the taxable wealth back of each child in the district.

The school districts of the state fall somewhere between the two extremes of \$700 and \$100,000 of tax valuation back of each child; some are very poor in the possibilities for providing education, and some are sufficiently wealthy to provide all the means of education, with extra measure thrown in. In districts where each taxpayer carries a heavy load because of the high millage levy, the school cannot provide standard equipment and reasonable educational advantages for its children. This means that a high cost to the individual taxpayer will not insure a good school. On the other hand, it is not uncommon to find a district liberal in its expenditures with a superabundance of equipment, with good buildings, all provided at a small cost to each individual taxpayer.

It is pointed out that no county is free from these extremes, and that no administrative plan can correct the errors, except by a recognition of those principles which may be applied to all the people and to each individual taxpayer who is made responsible for state government and its maintenance.

FINANCE AND TAXATION

—The board of education of Fostoria, Ohio, has refused to sanction the expenditure of \$5,000 for band instruments. Low finances and a strict policy of economy were given as the reasons. It is suggested the project be financed by civic organizations.

—W. B. Reed, treasurer of the Peoria, Ill., board of education, has worked out the details for the \$3,000,000 building program. It covers a ten-year period and provides (1) for lot purchases, (2) new buildings, (3) equipment of new buildings, and (4) improvement of new grounds.

—After a strenuous campaign, the Welborn school district, Kansas City, Kans., voted \$71,600 in bonds for a new school. The vote was 366 for and 324 against the project. The opposition will contest the result upon the claim that two votes cast by persons living outside the district had been cast.

—Marion county, Indiana, under the direction of Supt. Fred T. Gladden, sells schoolbooks directly to the pupils, netting a profit of \$14,000 annually.

—The governor of Nebraska appointed a commission "to study the problem of new sources of revenue in connection with the subject of state school support." A thorough revision of the state tax system must be obtained, it is believed, if adequate school support is to be achieved.

—Florence, Colo. The school board has taken steps to refund one half of its bonded indebtedness of \$50,000 on May 15. The balance of the bonds will be retired from time to time as the money is available.

—Granite, Utah. Over 6,000 school children face the possibility of an enforced early closing of the schools due to a lack of funds. The board has

EDUCATION AND TAXATION

Any satisfactory solution of the problem of the financing of public education will involve, in many of our states, a reform in our system of taxation. Assessments must be equalized throughout the state. This will require a state-tax commission removed from political control. There will be needed, as well, local full-time assessors who can be removed for inefficiency in carrying out the work of their office. The development of an equitable system of taxation will doubtless include the acceptance of the state income tax, of a tax on business profits whether derived from incorporated or unincorporated business, the continuance of certain fees and licenses, as well as the inheritance tax. The acceptance of the severance tax and of a gasoline tax for state purposes seems also to be indicated. But it is not my purpose to discuss the methods of securing support. It is rather my purpose to call attention to the fact that it will be necessary to secure larger revenues from taxes imposed throughout the state if the equalization program that should be developed by the state is to be sufficiently supported.—George D. Strayer.

asked the taxpayers to approve a loan to complete the school year.

—Rochester, N. H. The school board has adopted a budget of \$104,000 for the school year 1930.

—Pitman, N. J. The voters have approved a school-tax budget of \$95,610 for the school year beginning with July 1.

—Teaneck, N. J. The school board has adopted a budget of \$351,450. Of the total, \$318,800 is for current expenses, and \$17,000 is for repairs and replacements.

—Morristown, N. J. The school board has adopted a budget of \$264,105 for the school year 1930, which is an increase of \$27,300 over that of last year.

—Supt. J. J. Richeson, of Youngstown, Ohio, has presented a report to the school board, in which he outlines seventeen ways in which school costs may be reduced. The total saving as effected by the reductions, amounts to \$68,864.

—Evanston, Ill. The school system will be able to operate for the balance of the school year as a result of a loan of sufficient size to carry the schools to the end of the year. Economy, with little curtailment of educational activity will be the watchword for the remainder of the school term.

—Elizabeth, N. J. The school board has adopted a budget, amounting to \$1,592,433 for the school year 1930. The new budget is \$29,000 below that of 1928-29.

—Oelwein, Iowa. The school board has reduced its bonded indebtedness by \$28,000, without an increase in taxation. It included not only bonds which had come due, but also a purchase of \$8,000 of outstanding long-term bonds which did not become due until 1942.

—Glen Ridge, N. J. The school board has adopted a budget of \$209,410 for the school year 1930.

—Teaneck, N. J. With the exception of an item for manual training, all four budget proposals of the school system were defeated by one hundred votes at the recent election. The board had asked

(Concluded on Page 103)

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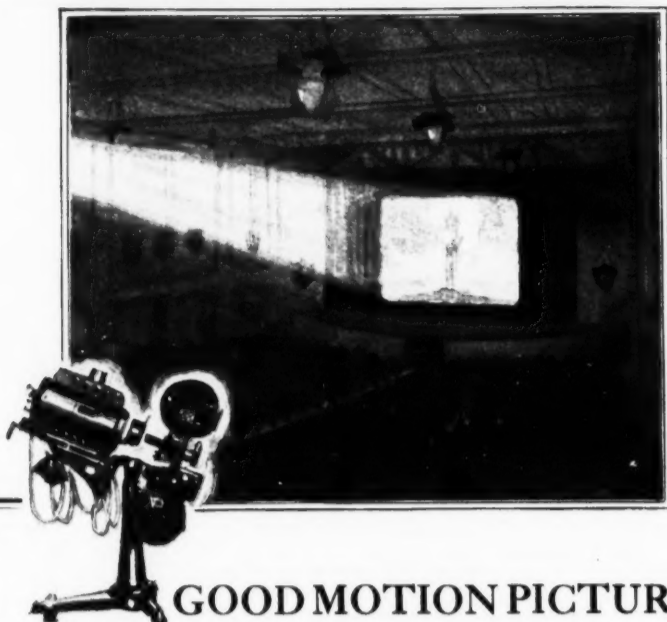
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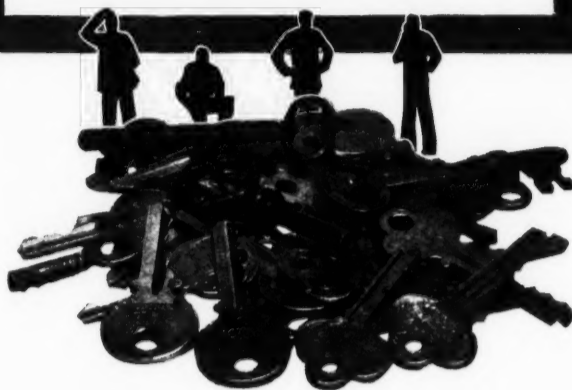
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(Concluded from Page 100)

for \$324,000 for current expenses and \$19,000 for repairs and replacements.

—Salem, Mass. The school board has adopted a budget for the school year 1930, calling for an appropriation of \$509,697. The new budget is \$3,584 in excess of that for the past year.

—Amesbury, Mass. The town finance committee has approved a budget of the school board, calling for an appropriation of \$133,873 for school purposes. Of this, a total of \$109,937 must be raised by taxation.

—At a recent meeting of the state board of school directors at Olympia, Wash., plans were considered for placing more of the financial burden of the district schools in the hands of the state.

—New Bedford, Mass. The school board has adopted a budget of \$1,690,000, with a saving of \$10,550.

—Chicago, Ill. A campaign has been started to raise \$74,000,000 for the operation of the city, the schools, the county, and sanitary district. Mr. S. H. Strawn is chairman of a citizens' committee which is working out plans for the campaign. The minimum requirement for the schools until July 1 is \$28,000,000.

—Haverhill, Mass. The school board has approved a budget, calling for an expenditure of \$628,650 for the school year 1930. The budget for 1930 is \$834 less than that for 1929.

—Stockton, Calif. A special school election has been called to vote on additional school funds. The election was made necessary through the loss of \$100,000 in school funds as a result of a court ruling.

—Teaneck, N. J. The school board has adopted a budget of \$461,713, as compared with \$469,411 last year. A reduction of \$16,000 was made as a result of cuts in salaries, athletics, furniture and equipment.

—Reading, Pa. The school board will shortly ask the voters to approve a bond issue of several million dollars for the purchase of sites and the erection of new buildings.

—Midland county, Mich., maintains 83 one-room schools, housing from 5 to 65 pupils, and the tax

rate varies from 65 cents to \$28.82 per thousand valuation. This statement was made in a public address by A. M. Thorsberg, county commissioner of schools. He urged larger units under a county system as the remedy.

—The total expenditures, public and private, for education in this country in 1928 was \$3,035,341,209, as reported by the United States Office of Education. The total number of students enrolled is given as 29,276,068. The expenditures represent an increase of \$290,000,000 over 1926.

—A recent report of the United States Office of Education shows that one-half billion dollars have been contributed to the support of college education during the year 1927-28. Of the total, one fourth came from tuition and educational fees; 23 per cent was appropriated by state and city governments; and 13 per cent was received from private benefactions. The Federal Government contributed over \$17,000,000, or 3.4 per cent of the total funds. Fifty-nine per cent of the total receipts went to institutions under private control.

—Youngstown, Ohio. Facing a deficit of \$528,000, the school board has voted to adopt a retrenchment program prepared by Supt. J. J. Richeson, which cuts \$175,000 from the operating expenses. Most of the reductions will be made in the building program.

—St. Louis, Mo. The citizens have been asked to approve a proposition for retaining the 85-cent school-tax rate. It was pointed out that there is an urgent need for the higher tax rate due to the increasing demand for education, which has resulted in increased attendance and additional school facilities.

—New Market, N. J. The school board has adopted a budget for the year 1930, calling for an expenditure of \$93,755 for school expenses. Of the total, \$54,500 has been allotted for teachers' salaries.

—Stratford, Conn. The school board has ruled that wards of charity organizations shall not be charged for tuition of those attending the Stratford city schools. However, nonresident parents who send their children to the schools will be charged, in accordance with the law.

—The dismissal of 800 teachers in state-aid school townships of Indiana has been suggested by Mr. J. G. Rossman of East Chicago, Ind., as a means of relieving the bankrupt conditions in the state-aid fund. Plans have been made for reducing the number of teachers and for curtailing expenditures in the schools.

—New Bedford, Mass. The school board has adopted a budget calling for an appropriation of \$1,690,000. Of the total, \$1,290,000 will be used for teachers' salaries, and \$301,000 for incidentals.

—Cleveland, Ohio. The school board has adopted a budget of \$18,083,000. Of the total, \$44,792 will be used for teachers' salaries. The budget also provides \$30,000 for custodians' pensions and \$10,000 for summer-school additions.

—Akron, Ohio. Mr. Clarence Foust, chairman of the finance committee, recently warned the school-board members that there is danger of reaching the limit in operating expenses. The operating expenses for 1930 are \$531,000 more than for 1929, and the present building program calls for an expenditure of approximately \$1,400,000. Operating expenses are expected to reach \$500,000.

—Brookfield, Ill. The school board has issued a statement calling attention to the serious condition of the school finances. It appears that the school funds have been completely exhausted. No taxes have been paid since the spring of 1928, hence the schools have been operating on borrowed money. In order to pay the teachers, the school board has resorted to the sale of tax-anticipation warrants.

—San Antonio, Tex. The school board has purchased a site for the Woodlawn District School, to be erected as part of the \$3,700,000 school-building program. The board has awarded contracts for school additions, costing \$160,000. The Travis School will be erected at a cost of \$90,866, and the Brackenridge Memorial School, at a cost of \$57,675.

—Bay City, Tex., has voted \$175,000 in bonds for a high school, to contain a library, a gymnasium, and an auditorium, in addition to six classrooms.

—The voters of Crystal City, Tex., have been asked to approve a bond issue of \$80,000 for a new building.

School-Bond Interest Rates Continue Low

Index of School-Bond Prices¹ Harold F. Clark, Ph., D., New York

School-bond interest rates fell during the month of February. The net interest rate on all school bonds sold during the month was 4.73 per cent. The index rose slightly in January and reached a level of 4.81 per cent. The fall in interest rate in February carries the index to the lowest level it has reached in the past twelve months. However, the rate is still higher than it was in February 1929. If one looks at the chart showing trend of interest rates he sees that the average tendency has been down since last fall.

What of the future? This is the question the schoolman is particularly interested in. The future

want to pay more than 4 per cent for the new loan and the present outlook is that his desires will be fulfilled."

The Federal Treasury has set a rate of 3¼ per cent on \$450,000,000 of nine-month certificates as its March financing. This rate is much lower than the Treasury had to pay last summer and fall, and doubtless gives some indication that the Treasury expects fairly easy money for some time to come.

It is of great interest that once again we find a school-bond issue sold for less than 4 per cent. A school district in the State of Massachusetts

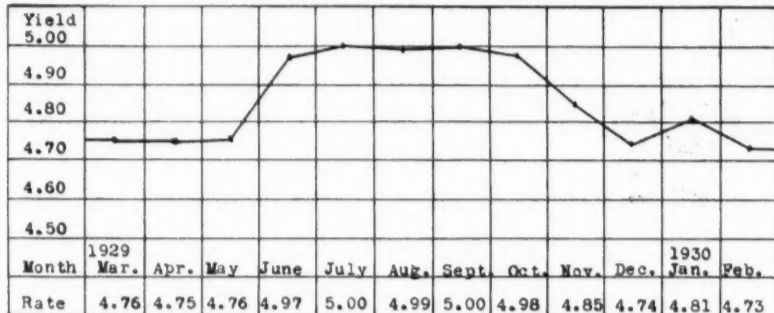


TABLE I. AVERAGE YIELD OF ALL SCHOOL BONDS SOLD DURING THE MONTH

of bond prices is dependent upon so many factors that there is always great hazard in predicting weeks ahead unless one follows all of the trends in the intervening period. Considering all the factors, it is the best opinion that this recent decrease in bond interest rates will be held and that over a period of time interest rates will touch

TABLE II
Amounts and Yields of Bond Issues²

1. School bonds sold during the month of February	\$ 19,120,000
2. All municipal securities sold during year (to date)	187,850,000
3. All school bonds outstanding (estimated)	3,267,000,000
4. Average yield of all school bonds outstanding (estimated)	4.65%
5. Yield of school bonds of ten large cities	4.40%
6. Yield of United States long-term bonds (quotation the middle of March)	3.37%

²The monthly total of school bonds does not include all the bonds issued in the month, due to the difficulty of obtaining the yield on some of the issues.

even new low levels. Barring some unexpected strain on credit resources, the schoolman can look forward this spring to selling his bonds at or below the current level of prices. This is not to intimate that such prices can be obtained every day during the next six months, or that carelessly sold bonds will carry such low interest rates. However, the school board that is careful in place, time, and condition of selling ought to be able to find a market as good or even better than the present market. Obviously, the course of bond prices in the summer and fall depends upon the course of business to a certain extent. If general credit conditions remain easy and business and stock-exchange needs do not make excessive demands upon credit there is no reason why substantially lower prices should not be registered before the end of the summer.

The comment of one of the New York papers on the Financing of the State of New York gives a commonly accepted opinion of the future of the bond market:

"So skillfully have the finances of the State of New York been handled during recent years that it has become almost an axiom in municipal bond circles that the State always gets the top of the market for its bonds. Last fall when the municipal market was at a low ebb the controller elected to market \$28,000,000, 4-per-cent notes due on May 15, in lieu of long-term financing. Now that municipal bond prices have rocketed, it is believed the State's financing plans will be announced soon, a fact which in itself is taken to mean that firm prices are here to stay and that last week's run-up was not merely temporary. It is common knowledge that the controller does not

1Copyright by Harold F. Clark.

want to pay more than 4 per cent for the new loan and the present outlook is that his desires will be fulfilled."

The average yield of long-term Federal Government bonds as Table IV shows was somewhat better in February than in January. Prospects are good for some improvement in the following months.

Table V shows that stock prices continued to advance during February, and that by the middle of March prices were about 15 points higher on the average than in November. Prices of indus-

TABLE IV
Average Yield of Long-Term Federal Government Bonds³

Past Twelve Months	Rate %	Year	Past Six Years	Rate %
1930		1928		
March	3.45	1927		3.437
Feb.	3.48 ⁶	1926		3.464
Jan.	3.51	1925		3.544
1929		1924		3.797
Dec.	3.46	1923		4.010
Nov.	3.45	1922		4.298
Oct.	3.67			4.301
Sept.	3.70			
Aug.	3.72			
July	3.67			
June	3.71			
May	3.67			
April	3.67			

³Taken from Federal Reserve Bulletin.
⁶Not final.

TABLE V
Security Prices and Yields⁴

Date	Average Price of 406 Stocks	Average Price of 60 Bonds	Average Yield on 60 High-Grade Bonds
1930			
March	167.4 ⁸	96.6 ⁸	4.63 ⁸
February	166.3 ⁸	96.4 ⁸	4.65 ⁸
January	156.3	96.5	4.64
1929			
December	153.8	96.5	4.64
November	151.1	95.7	4.70
October	201.7	95.1	4.73
September	225.2	94.8	4.76
August	218.1	95.0	4.74
July	207.2	95.2	4.73
June	190.7	95.3	4.73
May	187.8	95.7	4.70
April	186.6	95.8	4.69

⁷As reported by Standard Statistics Company, Inc. Used by special permission. 1926 average = 100.
⁸Not final.

trial bonds were somewhat lower during the first part of February and will reduce the average for the month to or slightly below the January level. By the end of February and the first of March, prices were substantially better.

Table VI continues to show falling prices for all commodities. By the middle of March one of the indexes had reached a new low for several

TABLE III
Bond Sales and Rates⁵

Year	Schools	Municipal	All Public and Private	Year	Average Rates
1929	\$230,000,000 ⁴	\$1,432,000,000 ⁴	\$10,194,000,000 ⁴	1929	4.67 ⁴
1928	218,000,000	1,414,000,000	8,050,000,000	1928	4.45
1927	266,000,000	1,509,000,000	7,776,000,000	1927	4.49
1926	260,000,000	1,365,000,000	6,344,000,000	1926	4.61
1925	323,000,000	1,399,000,000	6,223,000,000	1925	4.58
1924	288,000,000	1,398,000,000	5,593,000,000	1924	4.26
1923	206,000,000	1,063,000,000	4,303,000,000	1923	4.76
1922	237,000,000	1,101,000,000	4,313,000,000	1922	4.81
1921	215,000,000	1,208,000,000	3,576,000,000	1921	5.18
1920	130,000,000	683,000,000	3,634,000,000	1920	5.12
1919	103,000,000	691,000,000	3,588,000,000	1919	5.04
1918	41,000,000	296,000,000	14,368,000,000	1918	4.90
1917	60,000,000	451,000,000	9,984,000,000	1917	4.58
1916	70,000,000	457,000,000	5,032,000,000	1916	4.18
1915	81,000,000	498,000,000	5,275,000,000	1915	4.58
1914	42,000,000	320,000,000	2,400,000,000	1914	4.38

⁵By special permission, based upon sales reported by the Commercial and Financial Chronicle.
⁴Not final.

TABLE VI

Revised Index Numbers of Wholesale Prices⁹

Past Twelve Months

Past Six Years

All Com- Building

All Com- Building

Month

modities

Materials

Month

modities

Materials

1930

1928

97.7

93.7

Mar.

92.8¹⁰

96.3¹⁰

1929

97.7

93.7

Feb.

93.2¹⁰

96.1¹⁰

1928

97.7

93.7

Jan.

93.4

96.2

1927

95.4

93.3

1929

1926

100.0

100.0

Dec.

94.2

96.2

1925

103.5

101.7

Nov.

94.4

96.0

1924

98.1

102.3

Oct.

96.3

97.8

1923

100.6

108.7

Sept.

97.5

97.5

Aug.

97.7

96.7

July

98.0

96.7

June

96.4

96.4

May

95.8

96.8

April

96.8

97.9

Mar.

97.5

97.8

⁹United States Bureau of Labor Statistics, 1926—100.

¹⁰Not final.

⁹United States Bureau of Labor Statistics, 1926-100.
¹⁰Not final.

years. Price of building material is not likely to show any upward trend until there is a decided expansion of building activity.

—The new Strong Vincent High School to be opened at Erie, Pa., in September, will have a capacity for 1,600 pupils. Meyers & Johnson, of Erie, are the architects.

—The board of education of Beaver Falls, Pa., has purchased ground for a new senior high school. The building, exclusive of equipment, will cost \$538,000.

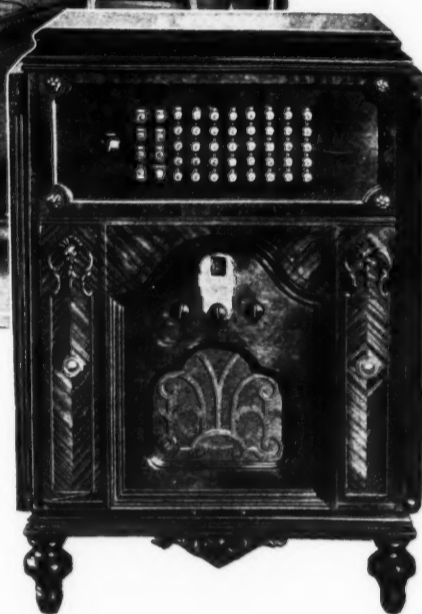
—Plainview, Tex. An administration building has been erected for the superintendent, the tax assessor, and the school board.

—The school board of Plainview, Tex., recently sold a bond issue of \$120,000 at par and accrued interest. The proceeds were used to enlarge the senior high school and to erect an administration building.

"Selective" Broadcasting for Schools



MULTI-PHONE
Sends Radio
Director's Voice and
Phonograph Music to
Every or Any Room



WHY OUR RADIO SYSTEM?

The **Multi-Phone** requires no assembling and can be installed as easily as any radio set. It is complete in **one compact cabinet**, designed for old or new buildings. Placed near the superintendent's or principal's desk, he can, by simple adjustment of the switches on upper part of cabinet, send suitable radio programs to any room in the building which he may select. Also with the microphone on his desk, he can send announcements everywhere in the building. He now has at his command not only the teaching staff of his school, but the leading educators of the world.

Education is now more competitive. Our "**Selective**" Broadcast System, with the director's guidance, makes it possible for

the student to broaden his intellect to meet this greater demand.

Schools not taking advantage of educational programs now on the air are fast becoming far behind in educational methods.

The **MULTI-PHONE** offers four distinct services at a *single cost*, namely, **Radio, Phonograph, Microphone and Television**. School officials tell us that our microphone is well worth the cost of the entire system.

The **Multi-Phone** provides for the transmission of the television impulse when necessary equipment is perfected.

FOR SMALLER INSTALLATIONS



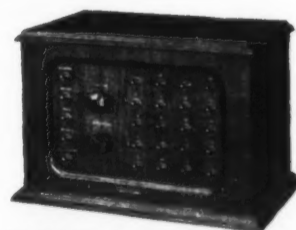
The Multi-Phone Junior

The **Multi-Phone Junior** is planned for installations requiring only 20 loud speakers.

A Phonograph may be attached to this attractive unit so that phonograph music, as well as radio and voice, may be transmitted to any or all rooms.

Let us know number of rooms to be equipped.

Write
us
now.



Multi-Trol

The **MULTI-TROL**, plus radio set, makes selective broadcast system in any school, factory, auditorium, hotel, hospital or a large home.

By connecting the **MULTI-TROL** to your present radio, you may have complete room control by simple adjustment of switches on the panel. To be placed with microphone on director's desk so he may conveniently send radio, phonograph music or voice to every or any room.

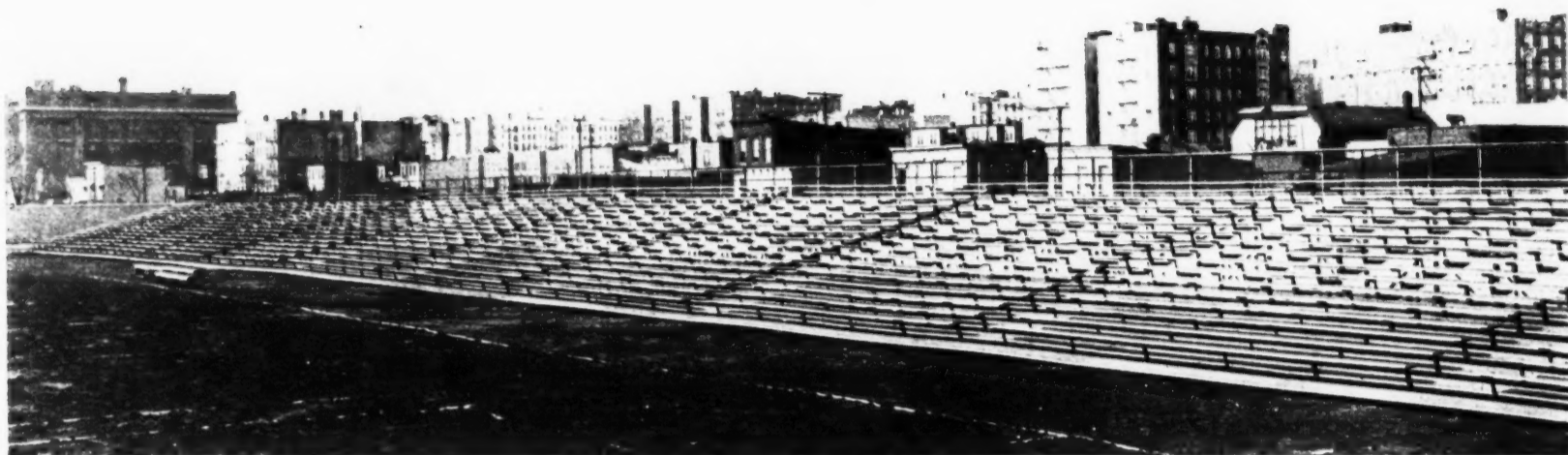
Easily Installed. It is as easy to install as any ordinary radio set and can be done by any radio dealer or Manual Training Department of a school.

Designed for 20 loud speakers. When writing please state type and make of your radio.

MULTI-SELECTO PHONOGRAPH, INC.

1610 MONROE AVE.
GRAND RAPIDS, MICHIGAN

WILLIAMS PORTABLE STADIUM



BOYS HIGH SCHOOL, BROOKLYN, N. Y.

Ten thousand seats in all for Boys High School — in a crowded section of Brooklyn.

Space actually is at a premium, yet with Williams Portable Stadium

they can leave it erected permanently or run a few rows inside easily for basketball.

... Are you acquainted with the Williams Payment Plan?

WILLIAMS IRON WORKS Inc.

430 EAST 102nd St.



NEW YORK, N. Y.

CHICAGO CORRESPONDENCE

After attending the N.E.A. convention at Atlantic City, Supt. Wm. J. Bogan and five members of his staff went over to New York City and paid their respects to Dr. Wm. J. O'Shea, New York superintendent. For two days the Chicago schoolmen visited New York schools of special interest. About 40 Chicago school employees attended the Atlantic City convention. This is less than half the usual number, but is accounted for by the numerous "payless pay days." On December 24 the teachers were paid (several days after the regular pay day), and then no further funds were forthcoming until March 4. There was great rejoicing among the teachers when they were paid on March 4 and they supposed their financial troubles were over until September next. However, the March 4 pay check was to cover January only, and the February check was due on March 7. It failed to materialize, and again the teachers are on the anxious seat.

The 11 members of the Chicago board of education receive no pay except the esteem and respect of their fellow citizens. Even this reward is not always forthcoming. The following incident will serve to illustrate:

The finance committee of the board of education literally worked days and nights over quite a period of time, to make a balanced budget which would pare expenditures and still not wreck the school system. During their labors, one of the newspapers severely criticized the board members and mentioned one member by name, apparently quoting him.

This board member was Mr. Lewis E. Myers, recently appointed to the board of education. Mr. Myers denied the statement attributed to him, and then philosophically commented on the situation as follows: (No doubt, his remarks will find a sympathetic response from school trustees everywhere!)

"We are constantly hearing criticism and complaint because the so-called business man will not accept public office. In the light of my experience, brief as it has been, I can very well understand why this is so. In the face of my willingness to spend 10 days and several nights in the preparation of the budget, to the neglect of personal matters,

and with no hope of reward except the satisfaction of having served the community, it is certainly disheartening and discouraging to be misrepresented, not only to one's friends, but to the entire citizenship of Chicago. Of course, relief can be had through resignation. However, when I accepted this appointment it was not with the expectation that I would serve 90 days and quit in discouragement, and I hope that repeated misrepresentation will not compel this action."

Practically all employees in the business department of the Chicago board of education are members of some union affiliated with the American Federation of Labor. The civil service employees in the educational department are likewise unionized to a considerable extent. A majority of the teachers are not affiliated with labor. There seems to be a strong movement on foot now, however, to unionize them.

Several years ago the Chicago Teachers' Federation (elementary teachers) was affiliated with organized labor but was forced to withdraw by a court decision. Thereupon, the state legislature enacted a law legalizing such affiliation, but by that time the Chicago Teachers' Federation had changed its mind about joining the A.F.L. High-school teachers set up two unions affiliated with the A.F.L., namely, the Men's Federation of High-School Teachers and the Federation of Women High-School Teachers. These two organizations are now rapidly approaching the 100-per-cent enrollment mark in high-school membership. Meanwhile, two more teachers' unions have come upon the scene. The Elementary Teachers' Union became a local affiliated with the A.F.L. about two years ago, and last year a new Playground Teachers' Union was launched. The latest move is toward a principals' union.

For some years there has been talk of a principals' union. Many of the principals came up through the teaching ranks, and had been members of teachers' unions. They retained their friendliness toward labor unions and became a nucleus for a group desiring a principals' organization affiliated with labor. The Chicago Principals' Club felt, however, that a principals' union (another

organization) would tend to weaken the influence of the principalship, and perhaps weaken the Club.

Recently there have been two movements toward unionizing the principals. The Men's Federation of High-School Teachers has debated the question whether it will permit principals to enroll, and an attempt to organize an independent principals' union is under way. Whether the latter will succeed is uncertain at this writing. There is doubt whether the other local teachers' unions would approve the request for a charter, and apparently such approval is necessary.

The advocates of the new principals' union say that they will not interfere with the Chicago Principals' Club but will supplement it. They say that the Club devotes its energies primarily to academic studies, whereas they would stress welfare of the members. They feel that the support of organized labor will give the principalship added strength. The principals feel that they are not receiving sufficient salary for the caliber of work and the responsibilities required. When salary adjustments were made after the war, the principals think they received the short end, and are in reality receiving a lower wage (in buying power) than before the war. In 1926 the board of education passed a salary schedule giving principals an increase sufficient to raise them to a highly paid professional level. The board reconsidered the schedule shortly afterward and it never went into effect. There have been no increases since. This long "delay" has rankled, and now, with several "payless pay days" passing by, the unrest grows greater.

The venture to unionize the principals is still open to doubt. Perhaps organized labor will not give them a charter (the principals have not infrequently been referred to in labor papers as "school bosses"). Then, too, the Chicago Principals' Club is probably the strongest organization in the teaching force, and may hold its membership intact. It maintains headquarters in the Loop, hires a full-time secretary and clerical help, charges \$40 dues, issues a monthly publication, prints occasional professional studies, compiles a yearbook and maintains a marked influence on school policies, educational methods, and school legislation. Its present president is the president of the Department.

(Concluded on Page 108)

Let Conn Organize Your School Band



Nicholas Senn High School Band, Chicago, 1929 Class A National Champions. Captain A. R. Gish, director. The great majority of instruments used in this band are Conns and Captain Gish is an enthusiastic endorser of Conn instruments.

YOU may be sure of a successful school band if it is organized in co-operation with Conn. You know that you can depend on any plan sponsored by Conn, the world's largest manufacturer of band instruments, established for more than fifty years as the unchallenged leader in the band field.

Conn has helped to organize and develop hundreds of school bands, large and small, in all parts of the country—under all sorts of conditions. From this experience has been perfected a plan which you will find exactly fits the requirements of *your* school.

Ready for Concert in 60 to 90 Days

Starting with beginners it is easily possible to have a real, playing band in 60 to 90 days. Many give creditable concerts within that time. Factory organizers handle all details for you including organizing, instruction and even financing of equipment needed. You'll be surprised how easy it is to organize a successful band this way.

Full Information Without Obligation

Please feel free to write us fully regarding any band organizing or maintenance problem. Our complete service is available to you without obligation. Write for expert advice on any band subject or merely mail the coupon for full information and free book, "Band Organizing Made Easy."



This interesting book sent free without obligation. Just mail the coupon.

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INSTRUMENTS
WORLD'S LARGEST MANUFACTURERS

**C. G. CONN, Ltd., 460 Conn Building
ELKHART, INDIANA**

Without obligation please send me full details of your band organizing plan for public schools.

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Position _____

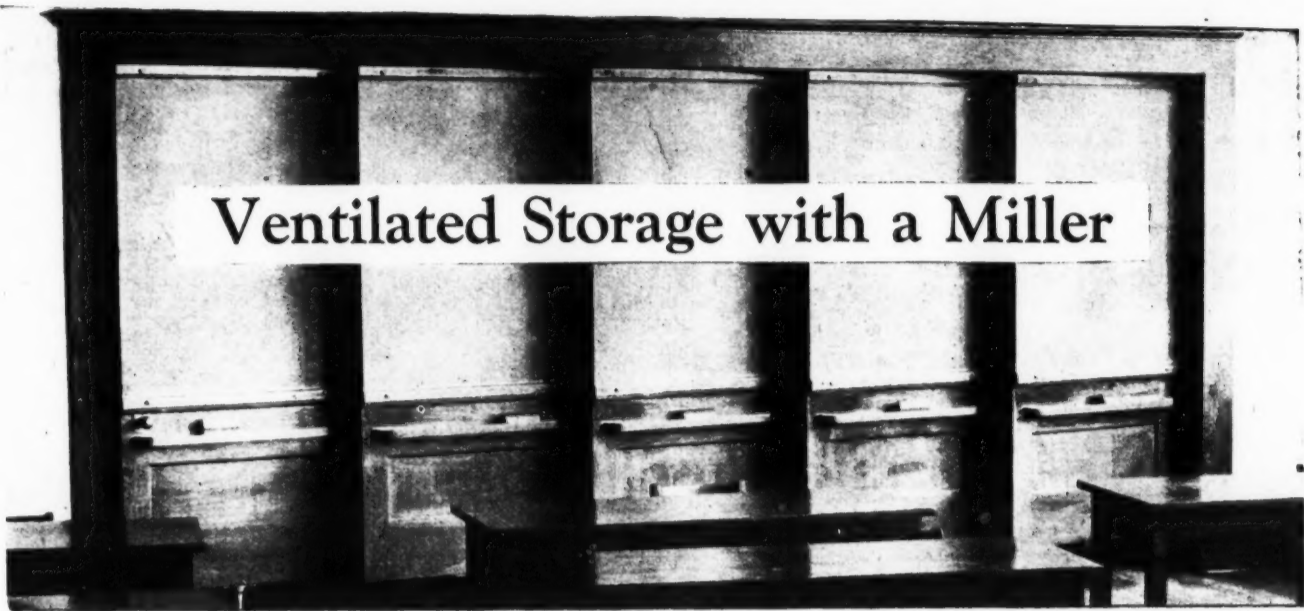
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Address _____

City _____

State _____

April Showers and Raincoats Demand



Ventilated Storage with a Miller

Wraps must be ventilated after storing that all odors and foul air may be carried off and out of the schoolroom. It is difficult enough to prevent a schoolroom from becoming stuffy without the added hindrance of an old fashioned or a poorly fashioned cloakroom or wardrobe. The Miller wardrobe operates on a perfect ventilation principle. Its doors are always in sight . . .

Always in mind. One does not forget to close them when they are not in use. Other wardrobes that push up or back cannot offer the ventilation advantages of a Miller. The Miller also has additional important characteristics that merit your attention. Write for our catalog W 7 for the complete information.

123 WEST EIGHTH ST. **K-M SUPPLY CO.** KANSAS CITY, MO.

(Concluded from Page 106)

ment of Elementary School Principals of the N.E.A.

Because of the financial crisis in Chicago, the school-building program has languished, but early in March contracts were let for the new Volta elementary school to be located at Argyle and Avers Avenues on the north side of the city. This is a 1,068-pupil-capacity school to cost \$500,000, including equipment and site improvement. It is the F-type plan slightly revised. It is to serve pupils from kindergarten to sixth grade only, and makes no provision for formal manual training and household arts. Corridor lockers have supplanted classroom wardrobes, except in the kindergarten. Following is an enumeration of the facilities:

Twenty-one regular classrooms; 1 kindergarten; 2 handicraft rooms; 1 artroom; 1 library; 1 gymnasium (40 by 60 ft.); 1 auditorium (seating 400); 1 principal's office.

Contracts for another building of this type, the Morgan Park elementary school to be erected at 110th Street and Western Avenue on the far south side, are pending before the board of education. These 3-story, fireproof, steel and concrete structures will be constructed at approximately 40 cents a cubic foot, exclusive of equipment and site improvement.

COST OF CLEANING SCHOOLS

A committee of building managers in Chicago, who are experienced in the cleaning and maintenance of commercial structures, made a study of the costs of operating the public-school buildings of that city. They estimate that there are more than 700 persons employed in cleaning and caring for school buildings who could be dispensed with, without any loss of efficiency.

"The unnecessary jobs are so much political patronage," says the *Chicago Tribune*. "The money that is spent for superfluous janitors might be saved or it might be spent for the benefit of the children or the teachers. The evidence that the money today is being wasted confirms in detail the finding of the National Education Association, which inquired into costs of school operation and costs of in-

struction in the larger cities in the country. Chicago spends 53 per cent above the average per pupil for school maintenance and 16 per cent less than the average for instruction. For example, New York pays \$8.22 per pupil for school building operation, while Chicago's pay rollers run the cost up to \$17.49. In contrast, New York spends \$114 for instruction, while Chicago can afford only \$83.97."

MILWAUKEE RULES GOVERNING CLERKS IN GRADED SCHOOLS

The board of school directors of Milwaukee, Wisconsin, has adopted a report of its committee on finance governing the rules pertaining to the qualifications, appointments, and compensation of clerks in the graded schools of the city. The rules are as follows:

Clerks in the graded schools will be paid in accordance with the following schedule: 50 cents per hour for the first year; 55 cents for the second year; 60 cents for the third year. Clerks whose length of service permits will receive 55 cents per

RESEARCH IN EDUCATION

There has always been research in education and there always will be. In the past, however, it has been of the feeble type best characterized as "by guess and by gosh." During the past fifteen years, developments as marvelous as those of research in industry have taken place. Today there are measuring instruments, trained workers, organized bureaus, and intelligent activity in all phases of educational work from the superintendent's office to the classroom. Today research is speeding up progress and rapidly increasing efficiency. Never has the future in education been so full of promise.

S. A. Courtis, Educational Consultant,
Detroit, Michigan

hour, beginning with January 1, 1930, and 60 cents per hour, beginning with September 1. Substitute teachers, acting as clerks, will be paid at the rate of \$5 per school day of seven hours each.

Under the rules, one clerk will be allowed for each Class C or D building, (enrollments of 1,200-1,500,) the assignment to be authorized by the superintendent, and subject to the proper distribution of the principal's time as reported in the monthly report of the principals. One junior or senior clerk per building will be allowed in junior or senior high schools with enrollment up to 1,500; one additional junior clerk will be allowed in buildings with an enrollment in excess of 1,500.

The qualifications for junior clerks are high-school graduation, including or supplemented by commercial training and experience in commercial offices. These clerks must be able to do simple routine work in the keeping of records, and must be able to handle administrative duties as required. Senior clerks will have the same qualifications; they must also compose and type routine letters without dictation, and must do other responsible clerical work involving judgment and a knowledge of modern office practice.

The salaries of junior clerks, division C, range from \$1,060 to \$1,300; senior clerks, division D, will receive salaries ranging from \$1,420 to \$1,660. All clerks will receive one increment as of January 1, 1930, provided however, that persons now receiving \$940, will receive \$1,060 as of January 1, 1930. Junior high-school clerks upon the recommendation of the superintendent and the approval of the board, may receive the status of senior clerks and be paid accordingly.

All school clerks will have three weeks' vacation with pay.

—Detroit, Mich. The school board has asked the city council for a \$5,000,000 advance on its budget fund, for the purpose of building scheduled schools now and helping to relieve the unemployment situation. While the appropriations do not become available until July first, it is expected that the funds will be advanced merely as an emergency measure to relieve the present situation.



A NEW PRINCIPLE of Self-Verifying SEAT WORK



*If its
right ~
you see
through it*

Thomas E. Thompson introduces a novel and effective principle of self-verifying problems with this new series of Seat Work.

BRADLEY SCHOOL MATERIALS STIMULATE INTEREST Number Work



Market Day Problems

Employing the fascinating pastime of "playing store" in an attractive and colorful seat work. Merchandise is represented by pictures on large "Store Cards," each item marked with its price. Eight "Purchase Cards" bear examples in addition made up of items on the "Store Cards." If these are added correctly, the answer is found on a corresponding "Cost Card," which the pupil matches with his "Purchase Card."

completing his problem. In handsome black, green and yellow box.

Price, \$0.60

The Missing Number Drill

Literally "steps to success" in arithmetic, the problems in the design of a flight of steps—simple at the start—more difficult at the top. Three large cards, with complimentary answer cards, all of heavy manila tag. In strong portfolio.

Self-Verifying Number Cards

8267—Combining number matching examples in addition and subtraction in numbers 1 to 10. Slotted cards printed two sides with domino problems and numerals and correlating slips with answers. In strong partitioned box.

Price, \$0.40

Reading and Language



Pictures That Talk

8003—A real picture matching and reading novelty in seat work, telling the story of Goldie Locks and the Three Bears. Three sheets of cardboard, each containing twelve miniature pictures in bright color, of incidents in the story on one side and one large picture on the reverse are cut into sections and laid on cards with text referring to each small picture. When each small picture is correctly placed on its corresponding word space, the work is turned over, and the large

colored picture is shown properly assembled. A unique, colorful, interesting and instructive seat work in keeping, with progressive child training. In strong box with colored picture label. Size 9 x 12.

Price, \$0.60

Bradley's Self-Verifying Phonetic Cards

Color and novelty add to the effectiveness of this seat work, combining picture matching and word building. When the pictures on cards are matched with complimentary slips, the corresponding words which name the pictures are completed.

Price, \$0.30

Econom Word Builder No. 1

8271—The most popular and best made of the standard type word builder. Contains a large quantity of unusually large size tablets in a Bradley long-life box.

Price, \$0.25

The 100 Subtraction Facts

is self-teaching and self-testing. A series of problems with a common answer are printed on cards with a hole punched in uniform position on each card. When the cards are stacked, if the correct answer is selected, the pupil can look through the entire stack.

The child who is obliged to verify each number-fact card by comparing the position of the hole with that on the answer card will take about a half hour for the work. On the other hand, only a few minutes will be needed if he knows the correct answers at once.

The same effective principle is used in two other numbers covering division and the proper use of verbs and pronouns.

- No. 8029—The 100 Subtraction Facts
- No. 8026—The 90 Division Facts
- No. 8030—The Troublesome Verbs and Pronouns—Correct Usage

Price, per box\$0.40

Send for a copy of Catalog "A" which describes these numbers as well as the many other interesting items of Bradley's School Material.

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COMPANY**
Springfield, Mass.

BOSTON NEW YORK PHILADELPHIA
SAN FRANCISCO ATLANTA

Chicago: Thos. Charles Co., Agts.
Kansas City: Hoover Bros., Agts.

The Life of the Box is the Life of the Builder — Bradley Boxes last longest.



L-5042 MAGAZINE RACK.
Especially designed for the children's department of the library. It has five conveniently arranged compartments.



1200 INSTRUCTOR'S DESK.
Practical for chemistry, physics, biology and agricultural laboratories. Equipped with four drawers, cupboard, support rods, sink, water and gas cocks.

Craftsmanship and design Combine

We are always appreciative of the fact that careful design and good workmanship constitute a quality product. This is the keynote of **Peterson Performance** in Laboratory and Library Equipment . . . the large numbers of Schools and colleges using **Peterson Furniture** know they have selected with good judgment.

PETERSON SERVICE

The Service Department conducted for your convenience will gladly make suggestions and aid in the planning of space utilization. A rough sketch of the floor plans will bring their recommendations free of charge and without obligation on your part.

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TEACHERS' SALARIES

A COMPARATIVE STUDY OF TEACHERS' SALARIES

The El Paso school board has received a report from Supt. A. H. Hughey, indicating that the total salary list for 1929-30 will amount to \$989,230, as compared with a total list of \$839,840 for the year 1928-29. The net increase of salaries to teachers in the school system due to seniority, promotion, credit for professional study, higher certificates, etc., was \$35,995. A total of 111 teachers were employed in 1928-29, whose salaries amounted to \$113,395. A total of 73 teachers left the system during the past year, whose salaries amounted to \$95,470. Although only 38 new teachers were added, the salaries amounted to a total of \$17,925. There are 703 teachers employed in the schools of El Paso.

THE CHELSEA SALARY SCHEDULE

The school board of Chelsea, Mass., on February 5, adopted a new salary schedule for teachers, clerks, and janitors, providing for general increases of \$100 up to the maximum. The schedule which was adopted after a year's study of the salary schedules both in Chelsea and in other cities, does not include extra pay for professional improvement, since it was felt that the teachers, if adequately paid, would attend to the matter of professional improvement themselves.

The new schedule, which has already proved an added stimulus for better classroom work, provides for the following maximum salaries:

Senior High School—Headmaster, \$4,200; master, \$3,200; junior master, \$3,000; men heads of departments, \$2,700; women heads of departments, \$2,300; teacher-coaches, \$2,800; men assistants, \$2,500; women assistants, \$2,100; clerk, \$1,600.

Junior High School—Masters, \$3,800; submasters, \$2,700; men assistants, \$2,000; women assistants, \$1,900; teachers of manual training and

printing, \$2,500; teachers of music, \$2,000; clerks, \$1,400.

Elementary Schools—Principals, \$2,500; assistants, \$1,800; special classes, \$1,850; supervisors, \$2,200; director of Americanization, \$2,400; director of continuation school, \$2,500; director of music, \$3,100; director of physical education, \$3,000; director of drawing, \$2,400; attendance officer, \$2,600; clerk to attendance officer, \$1,400; clerk to school committee and superintendent, \$1,750; head janitors of junior and senior high schools, \$39 per week; assistant janitors and firemen of junior and senior high schools, \$34 per week; male sweepers of senior and junior high schools, \$33 per week; female sweepers of junior and senior high schools, \$20 per week; janitors in elementary schools, \$35 per week; part-time sweepers in elementary schools, 50 cents per hour.

THE PAY OF COLLEGE LIBRARIANS

The American Library Association, Chicago, Ill., has issued a report giving its findings in a study of salary statistics in effect on December 1, 1929. The report covers 27 university and college libraries, selected by type and by geographical distribution and is useful for comparative purposes. In the professional group, the range of salaries in the five departments was as follows:

Order department, a minimum of \$1,200-\$1,850, and a maximum of \$1,620-\$3,000; catalog department, a minimum of \$1,200-\$1,900, and a maximum of \$1,620-\$3,000; reference department, a minimum of \$1,200-\$3,000, and a maximum of \$1,900-\$2,400; circulation department, a minimum of \$1,200-\$1,950, and a maximum of \$1,500-\$2,200.

For the nonprofessional assistants, the range of salaries in the five departments was as follows:

Order department, a minimum of \$600-\$1,500, and a maximum of \$1,100-\$1,800; catalog department, a minimum of \$600-\$1,500, and a maximum of \$832-\$1,560; circulation department, a minimum of \$720-\$1,420, and a maximum of \$900-\$1,700; reference department, a minimum of \$600-\$1,380, and a maximum of \$1,200-\$1,550.

TEACHERS' SALARIES

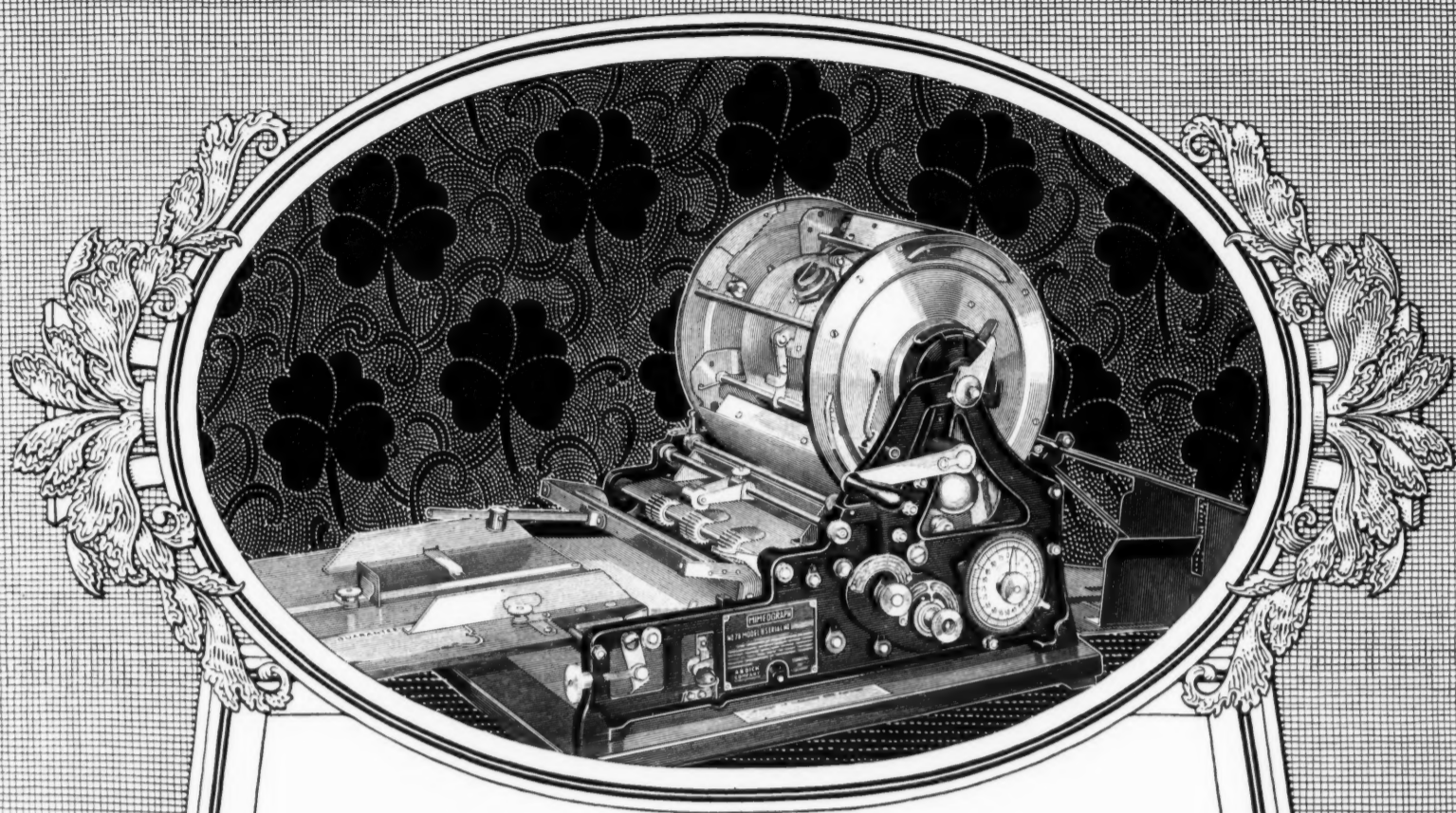
—McGill, Nev. The school board has for a second year authorized a bonus of 10 per cent on the annual salary of any teacher or principal who completes a six-weeks' summer course in an accredited college or university, or who completes a minimum of six weeks' travel in countries outside the United States. The bonus, as in past years, is paid in ten monthly installments.

—A revision of the salary schedules by public-school systems so as to make special provision for men teachers with dependents as a means of attracting desirable men to the teaching profession was recommended by Mr. Clyde R. Miller, of Teachers College, Columbia University, in an address before the Department of Superintendence at its meeting on February 22. Mr. Miller blamed present salary schedules for having driven men from teaching positions in the high schools and into administrative positions in education. He outlined a number of reasons for the scarcity of good teachers.

—San José, Calif. The elementary-school teachers recently won their campaign for higher salaries, when the voters by a large majority, voted to raise the salary tax. The tax increase voted was 13 cents on each \$100 of assessed valuation and will be used chiefly to raise the salaries of elementary teachers with eleven or twelve years' experience.

—At a recent meeting of the school board of Richland Center, Wis., a resolution was adopted granting the teachers leave of absence for illness and death in the immediate family. The leave permits the teachers to be absent, if necessary, five days during the year with no deduction in pay. The leaves which are cumulative over a four-year period, provide that a teacher absent because of illness, during the fourth year of service would be paid a full month in case she lost any time.

—The school board of Butte, Mont., has adopted new rules, providing that two years of experience are necessary before regular employment is granted to any instructor. The regular teacher is paid the difference between her salary and that of the substitute employed during her absence.



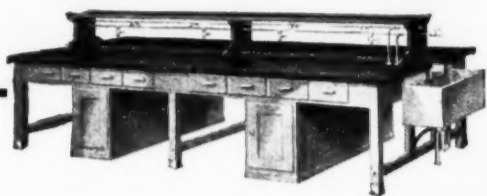
LUCKY EDUCATION

"Fortunate are the children of this day when we have the Mimeograph to help make education interesting," says a teacher. "I wonder if you realize how important this process has become in all things educational. Lucky are the pupils whose supervisors have learned the tremendous aid that the Mimeograph alone can give." Speeding communication, saving time, bringing order into routine duties—this is its big school job. Lesson assignments, designs, graphic problems, laboratory data, reviews, room programs, geometry diagrams, examinations—the list could be made tiresomely long—it reproduces faithfully, at a moment's notice, and in limitless quantities by the hourly thousands. School executives are learning to lighten their burdens with this master duplicator. Anyone can operate it easily. And its famous stencil sheets, Mimeotype and the new Cellotype, give mimeographing at less cost today than ever before. Write now for folder explaining its many school uses, to A. B. Dick Company, Chicago, or to branches in principal cities.

M I M E O G R A P H



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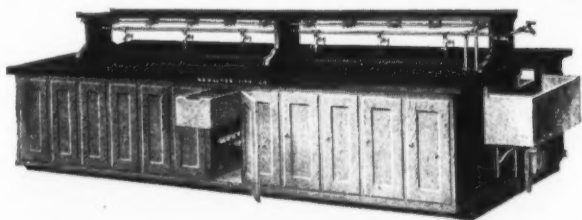
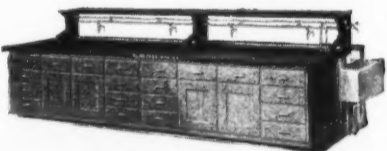
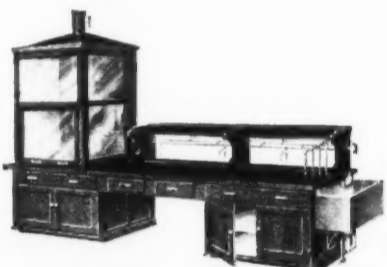
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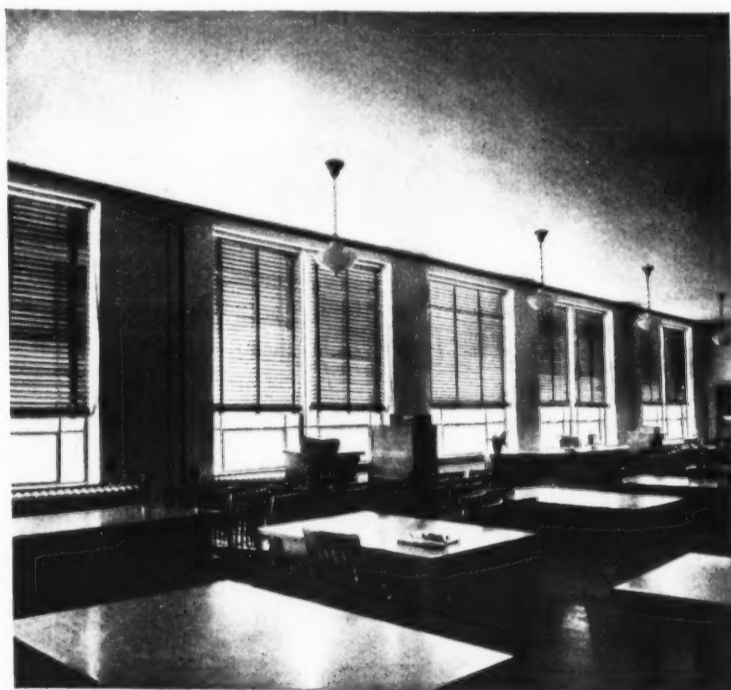
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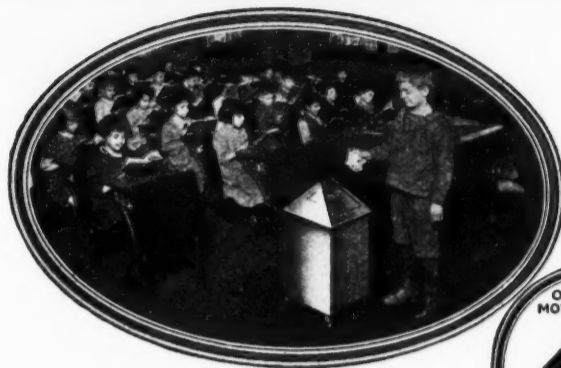
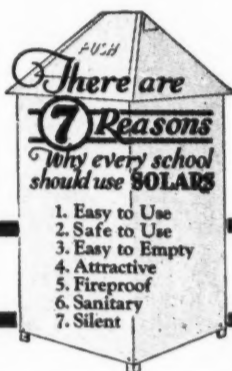
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School-Board News

—The Hofstadter and Moffat bill, which has been introduced in the New York state legislature, has for its purpose the reorganization of the New York City board of education. The bill, which would enlarge the board from seven to fifteen members, was introduced as a result of the criticism of the administration of the public schools made recently by District Superintendent John L. Tildsley, who protested against the quality of training in the elementary schools and the attention given to politics.

—The school board of Marlboro, Mass., has granted salary increases to the superintendent of schools, the attendance officer, the school physician, the school nurse, and the principal of the continuation school. The superintendent of schools received an increase of \$400, raising the annual salary from \$3,600 to \$4,000 per annum.

—Knoxville, Tenn. The school board has refused to approve the plans of the janitorial staff for the formation of a janitors' league. It was planned to establish a school for janitors during the next year.

—School-bus drivers of Allen county, Ohio, may be required to carry liability insurance, as a result of a ruling recently given by Attorney General Bettman to the state utilities commission. Mr. Bettman had ruled that boards of education are bound by no strict rules in making contracts for carrying pupils, and that school heads in 88 counties, including Allen, may make insurance a requirement of all drivers.

—Neenah, Wis. An ordinance to abolish the board of education as at present constituted and to create in its place a board of seven members elected at large, has been introduced in the city council. At present, school-board members are

elected by the council, one from each of the five wards of the city.

—Cleveland, Ohio. A check to determine the number of married couples in the employ of the city schools has been begun by Mr. Alfred A. Benesch, a member of the school board. In explaining his action, Mr. Benesch said he was prompted by the present unemployment situation. Where a man and his wife are employed, he believed one or the other should resign to give employment to someone else.

—The board of education, or any member of the teaching force, is not responsible for accidents which occur on the school grounds, or about the school building, according to John Callahan, state superintendent of public instruction of Wisconsin. The ruling was given in the case of a boy who was injured on the football field whose father asked that the board pay the doctor's bill. Mr. Callahan cited excerpts from cases tried in court which formed the basis for the ruling.

—Pocatello, Idaho. The school board is facing a serious lack of housing facilities due to the failure of a bond issue for new buildings. At present, 512 pupils are housed in portable buildings, as compared to 383 a year ago.

—Providence, R. I. By a vote of three to two, the school board has adopted a resolution asking the state redistricting committee to divide the city into seven districts, with one member of the committee elected from each district.

—Oshkosh, Wis. The school board has adopted a new policy for purchasing stocks of much used articles for the school lunchrooms. It was pointed out that some articles, although not becoming useless, lose strength in storage. It will be the rule to purchase in quantity but to avoid keeping even staples for long periods of time.

—Campbell, Ohio. Four custodians of school buildings have been granted an injunction by the court to prevent the school board from reducing their salaries or interfering with their duties. The custodians alleged that they were under civil service and that they have performed their duties and employed their assistants.

—Nashville, Tenn. The school board has been asked to consider a recommendation for an increase in the staff of truancy officers. The board acted to increase the present staff of one officer for negroes and one for white pupils to four, at a salary of \$160 per month.

—Portsmouth, Ohio. The school board, through a court order, has obtained the naming of a sinking-fund commission for the school district. The commission, which includes five members, has been appointed for terms of one, two, three, four, and five years.

—The school board of Poplar Bluff, Mo., has adopted a rule, providing that only local teachers will be employed, who have had two years of teaching experience. The rule eliminates the home girl, who after graduation from high school, completes two years of college work.

Another rule eliminates the employment of married women as teachers. In the future, contracts with women teachers will contain a clause to the effect that the marriage of a teacher automatically terminates the contract. The rule seeks to eliminate the teacher who signs a contract to teach, but who expects to marry before the close of the school term.

—Minneapolis, Minn. The city planning commission has been stripped of its power to supervise the school-board's building program, in a decision recently given by the district court. The court, in its decision, sustained the school board's contention that it had the right to purchase real estate and to construct school buildings without being subject to supervision of the planning commission.

—Brockton, Mass. The school board has taken steps to obtain better fire protection in the matter of school inspections, and to install improved fire-protection methods in the schools. It is planned to install special fireproof safes in all school department offices.

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—Cedar Falls, Iowa. The school board has issued a warning to students against committing acts of violence in connection with class rivalries. The board called attention to a rule adopted in 1928 to eliminate acts of violence and indiscretion on the part of students.

—Princeton, W. Va. At the beginning of the school year, the board of education adopted a new policy, authorizing the sale of school books through the office of the clerk in the high-school building. All books were sold at cost, plus the amount of the carriage to the patrons of the city and district. The plan was a marked success and effected a saving of \$1,500.

—Princeton, W. Va. At the beginning of the school year, the board of education awarded the contract for a system of flood lighting on the athletic field of the high school. This field, which is the only one in West Virginia illuminated for night football, was equipped for the purpose at a cost of \$5,700. All football games are now played at night and the attendance at games has more than trebled, with the result that the athletic program is on a self-supporting basis.

—Cleveland, Ohio. The school board has set aside \$19,963,000 for operating expenses for the year 1930. The budget appropriations call for \$17,783,000, leaving a balance of \$2,180,000 for meeting the other expenses. An appropriation of \$30,000 for the custodians' pension fund is also included in the budget.

—Akron, Ohio. The school board has approved a recommendation of Dr. Thomas W. Gosling, superintendent of schools, that the superintendent be responsible for the transportation of crippled children, including the selection of the method of transportation. The board approved Superintendent Gosling's recommendations for rules to guard against bus accidents.

—The school board of Campbell, Ohio, has been summoned to court to answer to a charge that it violated the civil service rule in reducing the salaries of school custodians and taking from them the privilege of employing their own assistants. The custodians alleged that their pay was reduced without a ten days' notice or a hearing before the

civil service commission. A temporary injunction has been issued to restrain the board from putting its order into effect until after the court has passed on the matter.

—Providence, R. I. The school board has adopted a resolution of Mr. F. J. Brady, providing for a redistricting of the city into seven school districts, with one member elected from each in elections held in "off" years.

—Mr. William Porter, clerk of the school board of Youngstown, Ohio, in a recent statement, points out that the use of portables in the schools has dwindled with the passing of each semester. The number of outside classrooms has dropped from 39 in 1929, to 32 in 1930. During the first semester of this year there were 36 portables in use.

—"The only thing one ever receives as a member of a board of education is criticism," said William J. Weber, vice-president of the New York City board of education, in a public address recently. "They may tell you of the wonderful things that are accomplished with a larger board, but I remember a large board we had here, consisting of 46 members, and those 46 members did more talking and less work than any 46 I ever knew. This city does not have to apologize for any of the members of its board of education or its teaching force."

—Due to economic pressure, the New Castle, Pa., board of education found it necessary to eliminate the vacation school and all kindergartens. There will be no retrenchments, however, in the essential features of the school system.

—The school board at Julian, Nebr., has lost its entire cash balance of \$7,000 through the failure of the Bank of Julian during the first week of March, 1930. The school district has warrants outstanding amounting to \$15,000.

Success is a spiritual quality which cannot be measured by material things.

—Roger Babson.

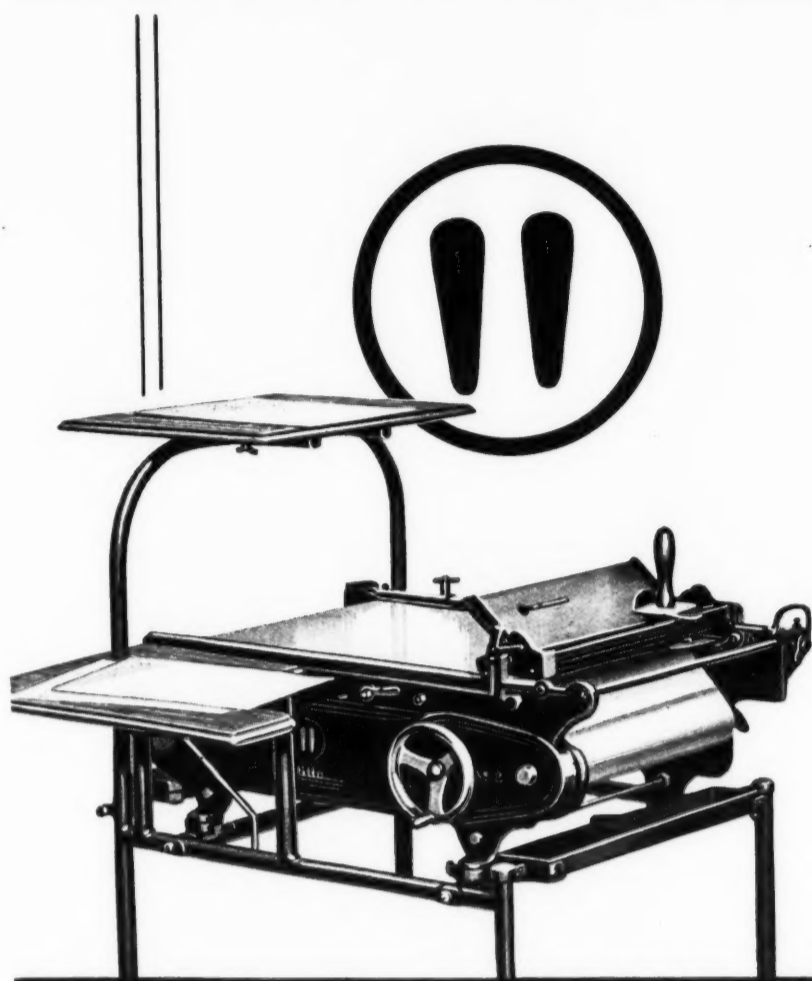
—The school board of Minneapolis, Minn., has adopted an amendment of the residence rule, requiring that all teachers employed in the public schools shall be residents of Hennepin county.

—The school board of Minneapolis, Minn., has voted to continue the sale of wastepaper in the schools on the present plan. An amendment to conduct the sale of paper under the direction of the school principal or the parent-teacher association and in conjunction with a member of the junk peddlers' association was lost by vote of the members.

—The school board of Toledo, Ohio, has adopted a new schedule of fire insurance for the school buildings of the city. The new schedule, which was prepared by Mr. R. S. Wenzlau, director of schools, increases the valuation to 70 per cent on school buildings which are nonfireproof, or partially fireproof. It lowers the number of insurance policies and gives greater protection to the more hazardous buildings. The present valuation of the school plant has been raised from \$794,000 to \$1,300,000. A special insurance fund of \$75,000 has been established to take care of fireproof buildings.

—LaSalle, Ill. The school board has adopted a rule, calling for the appointment of new teachers in the order in which their applications are received. The rule goes into effect in September, 1930. Under the new regulation, all persons seeking teachers' positions must be residents of the school district and must be graduates of a junior college or its equivalent, and hold a first-grade teacher's certificate.

—The high school at Vancouver, Wash., has introduced the Morrison plan of individual instruction in the mathematics department with considerable success. At the first grading period, following the introduction of the new plan, it was indicated that failures had been reduced from an average of 12 per cent under the former plan, to 4 per cent under the Morrison plan. The plan was preferred by 300 students of the department. A continuance of the plan, based on the results of the experiment, has been asked by all the mathematics teachers.



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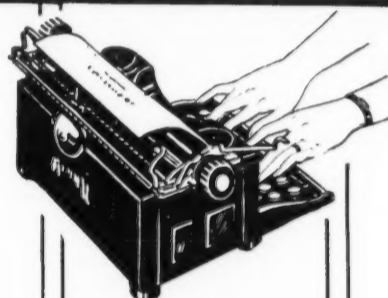
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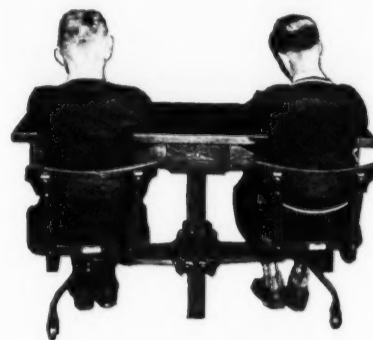
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Third Annual Convention of Public-School Business Officials of California

H. M. Monroe, San Francisco, Calif.

The third annual convention of the Public-School Business Officials of the State of California was held in San Francisco March 13-15 inclusive. From the standpoint of attendance, interest, and the high plane of the papers and discussions, this convention was far the best of any held to date.

Under the leadership of Mr. W. E. Record, business manager of the Los Angeles schools, the program was replete with subjects timely to all California school officials.

President Record called attention to the splendid editorial in the March issue of the *SCHOOL BOARD JOURNAL*, specifically directing attention to the responsibilities and possibilities of the position of the business manager of the school system. He stressed the fact that now is the ideal time to build, that materials are lowest that they have been in years, as well as an excellent opportunity to aid President Hoover in his solution of the unemployment problem.

Mr. W. E. Whalin, superintendent of buildings and grounds of the Oakland, California, schools, traced the development of the duties requiring a business manager to administer them. In a most concise way he told his audience that the business manager is a part of the public school system, a partner of the superintendent of schools, one who frees the head to devote his thought and time to the educational end of the schools, rather than devoting his energies to the physical plant, maintenance, equipment and the like.

Mr. Walter Morgan, director of research of the state department of education, spoke upon "Simplification of Business Administration through Combination of Districts," showing where greater economy of time and better results would be obtained if the many school districts of the state could be combined. His analogy to business corporations effecting combines was especially forceful.

Hon. Vierling Kersey, state superintendent of public instruction, stressed the relationship existing between the business-management phases of school administration and the instructional aspects, in the following respects: (1) school environment, (2) lighting and ventilation, (3) personnel of janitorial and engineering forces, (4) markets of equipment and supplies, (5) finances, (6) insurance and safeguards against accidents.

"The Purchasing of School Supplies" by Leonard Leavy, purchasing agent of the city and county of San Francisco, was most interestingly discussed. Mr. Leavy showed the economies that might be effected by many small districts uniting for buying purposes, the need of standard specifications, the ability to command superior quality of merchandise, and expert buying knowledge available in effecting such union of smaller districts.

"The Public School Accounting System" was a most helpful paper by Mr. Harry H. Baskerville, member of the Los Angeles board of education, and one of the leading accountants of that city. His message of greater uniformity in accounting practices, definition of terms, usability of the accounting system installed, formed the principal points of this splendid address.

The outstanding item of the annual banquet held the evening of March 13, was the appointment of a committee of five from Los Angeles to study and report at the next convention means and methods of preventing the shrinkage of the sun (as this danger was announced by a noted "professor" from the University of Oshkosh), and further referred to Los Angeles because nothing ever shrinks in that city.

The report of a special committee for the "Study of Budget Forms and Annual Reports" was so constructively presented that this paper might be called the most concrete of those read at the con-

vention. The Association adopted the report in full, authorizing the committee to continue its work for another year, and further, to send a representative to the National meeting in New Orleans in May. The report, by the way, is using as a guide Bulletin No. 24, 1928 Series, U. S. Office of Education.

"The Continuing Census in San Francisco" was explained by Miss Emma Noonan, director of the bureau of attendance and guidance, while the "San Francisco City Employees' Retirement System" which gives all city employees, including teachers, the benefits of the local pension as well as that allowed by the state, was presented by Mr. John W. Rogers, president of the San Francisco Retirement System.

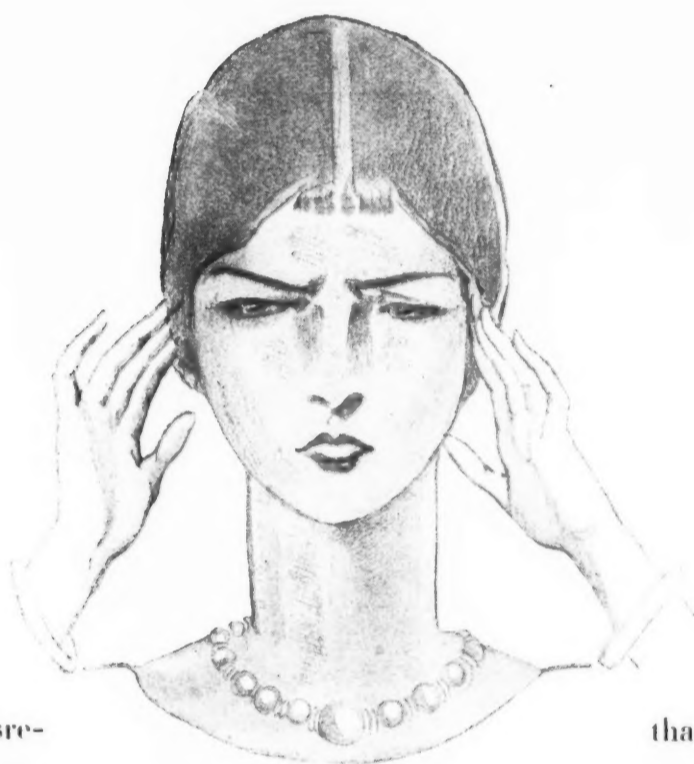
"Developments in Material for Visual Aids to Instruction" was described by Mr. Roy T. Granger, of Oakland, while the "Operation of the San Francisco Textbook and School Libraries Bureau" was depicted by Miss Mary Mooney, director of the department for this city. Both interesting papers. These were followed by Mr. N. Bradford Trenham, Secretary, Educational Commission, California, Taxpayers' Association, in a treatise on "Economies to be Effected Through Public-School Business Administration." A most constructive study, general in its recommendations, but stressing the tremendous responsibility of those intrusted with the "funds which already exceed in amount those allotted for any other governmental activity in the state and almost equal the others combined."

The evening of March 14 was made a radical departure for the convention. The exhibitors, some twenty in all, took charge of the program and each was allotted three minutes to discuss the general developments of the line of manufacturing as represented by his exhibit. Avoiding specific reference to his own wares, each distributor gave a comprehensive view of the present and future outlook for school supplies. The success of the evening should commend itself to a repetition another year for this association and is most urgently recommended for the basis of a round-table meeting for other organizations.

Saturday morning, March 15, the delegates,

(Concluded on Page 118)

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Brooklyn College of Pharmacy, Brooklyn, N. Y.

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St. Johns College, Brooklyn, N. Y.

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Ridgewood, N. J.

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Miscellaneous

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Indianapolis, Indiana

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Nurses' Home,
Evanston, Illinois

* * *

Interlake Iron Corp.,
Chicago, Ill.

* * *

Keifer Hospital,
Detroit, Mich.

(Concluded from Page 116)

wives, and guests were given an exhibition of boating and Sea Scout Activities.

The officers elected for the new year are: David P. Hardy of San Francisco, President; George Yeland, of Alhambra, first vice-president; L. L. Smith, of Fresno, second vice-president; Wm. H. Cox, of Alameda, secretary; Irving Oliver, of Glendale, treasurer; Miss Elizabeth Phillips, of Santa Ana, William Sheldon, of Los Angeles, and Don Rice of Oakland, are the newly elected directors. The next meeting will probably be held in Fresno, final choice subject to vote of the board of directors and officers.

Outstanding of the resolutions committee was the recommendation to send a representative to the New Orleans Convention (National) to confer with them in the matter of budget forms and annual reports, calling attention to the work done by the committee under the chairmanship of Miner Phillips of Pasadena.

Another instructive paper was read by Hon. S. H. Beckett, Insurance Commissioner of California, on "Protection of the School District by Insurance," covering in general the fire, Workmen's Compensation Act liabilities, pupil and teacher injuries, and injuries to the general public. The association went on record for adopting means of further clarifying the responsibility of school districts to pupils by legislative action at the next meeting of that body.

THE SCHOOL ELECTION AT SEATTLE

The question of whether the teachers' union should be recognized in the school system of Seattle, Wash., culminated in the recent election contest. Supt. Thomas R. Cole, together with a majority of the board of education, had for several years opposed the union. The election proved a complete victory for Superintendent Cole who contended for a principle.

Defeat of the Griffiths-McDonald school ticket attracted fully as much attention from the crowds that watched the returns as did the result in the mayoralty and council races. City superintendent Thomas R. Cole had given an ultimatum that Seattle must decide immediately whether the schools

were to be controlled by the public or by the American Federation of Teachers.

Dietrich Schmitz, Seattle-born world-war veteran and successful young banker, volunteered with Attorney Frank S. Bayley to make the race for school director on that platform. Dr. Edward Lincoln Smith, who was in sympathy with Superintendent Cole's attitude, was unable because of ill health to make a new campaign. Austin E. Griffiths, the other retiring director, was charged with favoritism toward the American Federation of Teachers, and, with Donald A. McDonald, was indorsed by the federation and the Central Labor Council. Neither Mr. Schmitz nor Mr. Bayley is experienced in running for office, while Griffiths has had a long career before the public, and McDonald is an old campaigner. Yet Schmitz and Bayley, carrying Superintendent Cole's fight, won handily.

Sometime before the election, Superintendent Cole tendered his resignation to become identified with the University of Washington. The fact that he struggled valiantly for a principle and was handsomely vindicated has enhanced his prestige to an enormous degree. He is strongly urged to remain in Seattle as superintendent of schools. It is believed, however, that he will not capitalize his victory, and that he will leave Seattle as previously announced.

STRENGTHENING SCHOOL-BUILDING PROGRAMS

The first annual conference of the National Advisory Council on School-Building Problems was held at Atlantic City, N. J. The purpose of the organization is to secure comprehensive data on methods of solving school-building problems, to make expert analyses of same, and to develop constructive suggestions.

The explanation is set forth that the council does not propose to standardize school buildings, but on the contrary the council recognizes that different parts of the country have their own problems which must be solved in the light of local conditions. The council is to serve as a sort of clearing house for problems arising everywhere.

In the discussions engaged in, Hubert C. Eicher, director of the bureau of school buildings, Pennsylvania state education department, and Charles

L. Spain, deputy superintendent of schools, Detroit, and Miss Alice Barrows, United States Office of Education, took the lead.

Since the council is divided into regions, it will serve two important functions: first, to foster research on school-building problems in and by each region, yet not without overlooking a common base of study for comparative studies; second, to render regional advisory service.

The conference elected as chairman, William John Cooper, U. S. Commissioner of Education; vice-chairman, S. M. N. Marrs, state superintendent of Texas; secretary, Miss Alice Barrows of the U. S. Office of Education.

The following regional chairmen were elected: For New England, Charles G. Maginnis, architect, of Boston; New York, Joseph H. Hixson, chief, division of schoolhouse planning, State department of education, Albany; North Atlantic, Dr. Hubert C. Eicher, director, bureau of school buildings, Pennsylvania State department of education; South Atlantic, A. T. Allen, North Carolina State superintendent of education; the Great Lakes, Frederick W. Garber, architect, of Cincinnati; Gulf States, S. M. N. Marrs, superintendent of instruction, Texas; and Sierra Nevada region, Vierling Kersey, California State superintendent of education.

SCHOOL-BUILDING NEWS

—The board of education of Bartlesville, Okla., has provided \$200,000 for schoolhouse additions and repairs. Rooms have been provided for teachers to prepare their noon lunch and each building has shower facilities. The board will ask the community to vote \$30,000 for additional classrooms.

—Peoria, Ill. The school board has adopted a ten-year school-building program, providing for the erection of three junior high schools, two or more grade schools, and the remodeling of another building. The program will involve an estimated expenditure of approximately \$2,844,000.

—Wauwatosa, Wis. The city council has voted to delay the proposed school-building program. It is planned to conduct a general survey to determine how much of the city's bonded indebtedness will be retired in three years and whether the assessed valuation can be increased to meet the expense.

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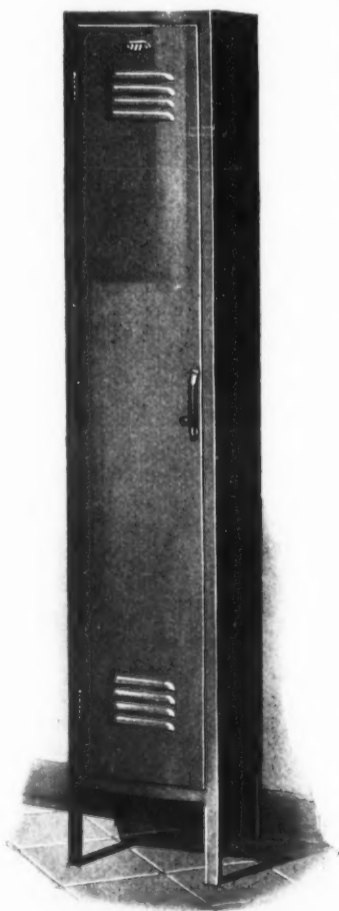
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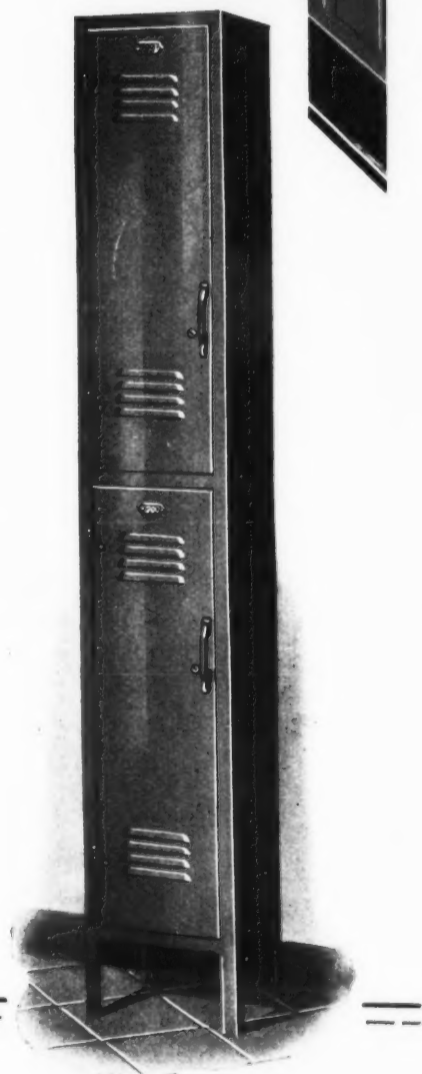
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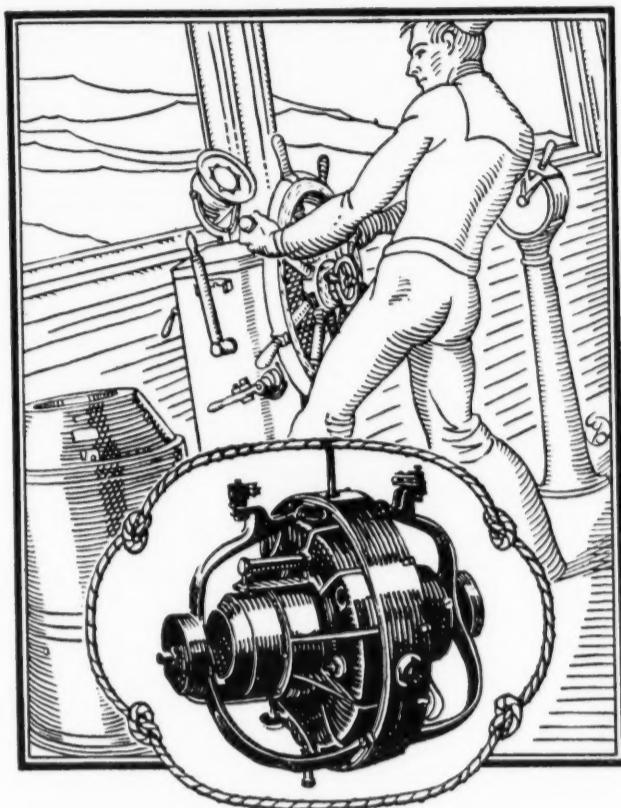
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Sanger Rules Governing the Duties of the Superintendent of Schools

The school board of Sanger, California, has adopted a new set of rules governing the duties and responsibilities of the superintendent of schools. The rules read as follows:

Election and Duties of the Superintendent

Sec. 1. As soon as practicable after the occurrence of a vacancy, or upon the expiration of the term for which the superintendent in service has been elected, the board shall select a superintendent.

Sec. 2. A superintendent may be elected only at a regular meeting, or at a special meeting duly called for that purpose.

Sec. 3. The election of a superintendent is for a term not to exceed four years. His term of office will begin on July 1, and his yearly salary will be in twelve monthly installments.

Sec. 4. The superintendent shall attend all meetings of the board, except when his own tenure or salary are under consideration, and shall have the right to speak upon any subject but without the right to vote.

Powers and Duties of the Superintendent

Sec. 5. The superintendent is the chief executive officer of the board, and as such, he will be expected to furnish a high quality of educational leadership and expert advice on educational matters.

Sec. 6. He shall be the head of the educational department of the school system. As such, he shall be given full charge of the supervision of instruction, assignment, and promotion of pupils, and the selection of supplies and equipment. The board is asked to give its approval when new types of instruction, or new expenditures are involved, or new contracts are to be signed.

Sec. 7. The initiative in matters relating to the appointment, assignment, transfer, promotion, suspension, or dismissal of principals, supervisors, teachers, or janitors, shall rest with the superintendent. The board must give its approval to the

superintendent's recommendation, but is without power to substitute new names or to initiate new appointments.

Sec. 8. The board shall leave to the superintendent's initiative, the organization of his office; but it holds him responsible for data or information that the board may need or call for.

Sec. 9. He shall determine all boundaries of school attendance districts and shall make such assignments of pupils to the different buildings or grades as may improve their classification or reduce the expense of maintaining the schools, or relieve overcrowded conditions, subject to the approval of the board.

Sec. 10. He shall have general charge of the enforcement of the compulsory attendance law and the issuance of employment permits.

Sec. 11. He shall devise and require the use of such a system of records and reports as may be needed to keep parents informed of the school status of their children and to keep parents informed of the scholarship, attendance, and deportment in the respective schools.

Sec. 12. He shall have authority to require teachers to attend such regular and occasional meetings as he may appoint for instruction in their duties, and the methods of teaching and governing the school, or mutual improvement.

Sec. 13. He shall visit the schools as often as his other duties will permit, note the methods of instruction, the discipline of each teacher, examine classes, and give such aid and encouragement to the teachers and pupils as circumstances may suggest. He shall have authority to hold at any time such examinations as he may deem necessary to inform himself of its conditions, and shall prescribe the time and manner of all examinations of classes in the school.

Sec. 14. He shall keep an efficiency record of all principals, teachers, and other employees on the

basis of a rating scale devised in cooperation with his co-workers.

Sec. 15. He shall keep himself well informed in regard to the school systems of other cities, their plans of organization, modes of government, method of instruction, and such other matters as may assist the board in legislating wisely for the highest interest of the schools; and for this purpose he shall be allowed to visit and study other schools. But at no time shall he be absent more than three consecutive school days without the consent of the board.

Sec. 16. He shall, on or before the 25th of each month, make up the monthly payroll. He shall also draw warrants upon the proper school funds in payment of all bills as directed by the board; and he shall be required to keep an accurate account of all money spent as directed by the board.

Sec. 17. He shall act as business manager for the board, and as such, he shall see that the buildings, furniture, heating systems, instructional apparatus, school yards, shrubbery, etc., are kept in a good state of repair. But, under no circumstances, shall he make new investments or enter into new undertakings, without having the consent of the board.

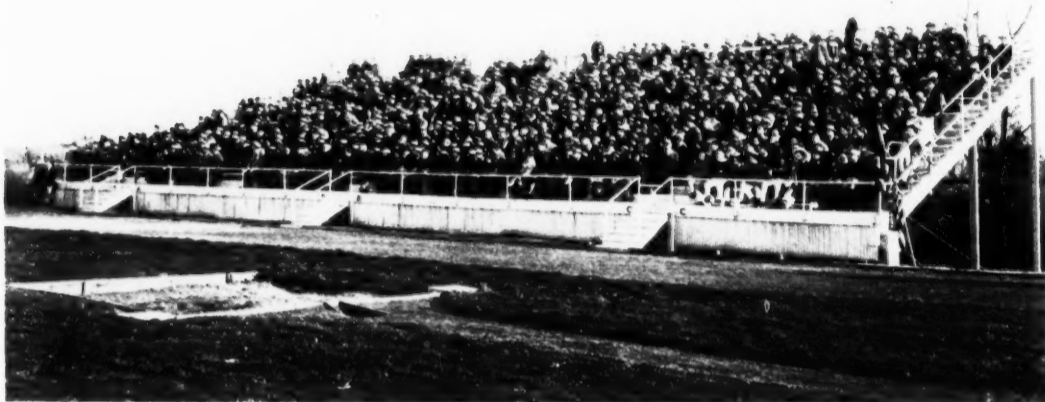
Sec. 18. He shall cause to be taken each year, a careful inventory of all supplies, books, furniture, etc., in the entire school system, and shall so arrange this data in the office by the use of proper forms, that it may be available at a moment's notice.

Sec. 19. He shall make written monthly reports to the board showing the scope of his activities, the progress and weakness of the various phases of the school system, and what he is doing to strengthen the weak points.

Sec. 20. He shall be charged with the general oversight of all the school buildings at times, and shall grant the use of schoolrooms, buildings, etc., as he may deem wise.

Sec. 21. As chief executive of the board, the superintendent shall see that the rules and regulations of the board are carried out. Whenever an occasion arises not covered by the rules, the superintendent shall exercise his own judgment in handling the situation and report such action to the board at its next meeting.

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Sec. 22. In addition to the above, he shall perform such other duties as may be enjoined by the board.

Sec. 23. The worth of the superintendent will be based upon his ability to give to the community a high type of education with reasonable economy; to advise the board of trustees in matters of school legislation; and to put the schools on a good sound educational basis



SIoux CITY TEACHERS' SERVICE STANDARD

The board of education of Sioux City, Iowa, has adopted a teachers' service standard, which enables each principal to talk over with his teachers, problems which come up for solution. Under the new standard it is possible for each teacher to know the attitude of the principal, supervisors, and the superintendent toward his or her own work.

The new system provides for a score card which lists the different functions and the marking of these functions. Early in the second semester, each teacher is asked to solicit an interview with her principal, her primary, and intermediate supervisor, for the purpose of talking over her reaction to the standard.

During the week ending March 22, each principal is asked to file a score card with the superintendent, upon which he makes an estimate of the teacher's point scale grade. Principals are required to obtain the score cards early so that they may be ready to undertake the work at the proper time. They are required to indicate on the score card whether or not the personal interview with the teacher has been held.

In the working out of the plan, it is the purpose of the board to maintain absolute fairness in all

the work. No secret marking is made, but every rating given is open to the teacher involved, and the principal and superintendent must hold themselves in readiness to discuss the rating with the teacher. It is believed that hearty support and honest methods in all parties concerned will mean much in promoting the welfare and happiness of teachers, as well as the betterment of the school system and the better teaching of the students.

MEN TEACHERS IN THE PUBLIC SCHOOLS

Mr. Frank M. Phillips, until recently statistician of the U. S. Bureau of Education, in a report, shows that less than 13 per cent of the day-school teachers employed in cities of the country during the year 1927-28 were men. The statistics cover all cities with a population of 2,500 and over.

According to the report, the total number of teachers in the day schools of 2,885 school systems was 361,314, of whom 45,413 were men, and 315,901 were women.

During the two years ending in 1928, the day-school population of the country rose from 11,714,231 to 12,273,412 boys, an increase of 4.8 per cent. The total current expenses of cities amounted to \$1,075,682,230.

The average number of pupils per teacher in the elementary schools had decreased to 37 in 1928, from 39 in 1926.

TEACHERS AND ADMINISTRATION

—Under the direction of Roy P. Wischart, state superintendent of public instruction of Indiana, an investigation of the teacher unemployment in that state has been made. The investigator, H. M. Whistler, fixes the total of teachers without positions at 863. He excludes the teachers who have found employment in other lines.

—The school board of Salt Lake City, Utah, has adopted a plan whereby the teachers will be paid their salaries in twelve monthly installments. Last year approximately 90 per cent of the teachers voted in favor of the twelve-month plan. The plan which goes into effect at once, was approved by all the teachers and principals.

—The teachers' association of Pasadena, Calif., has proposed a modification of the teachers' tenure law, to eliminate clauses which protect inefficient

and unfit teachers. The tenure committee of the association will work with the state teachers' association in the preparation of the proposed amendments to the law.

—The board of directors of the chamber of commerce at Wilmington, Calif., recently criticized teachers for not maintaining their residence within the city limits. A survey committee by the board revealed that of 129 teachers employed in Wilmington, only 23 live within the city limits. Only 1 out of the 6 principals lives in the city.

—Boston, Mass. The school board has revised its rules governing the eligibility requirements for the teachers' high-school certificate. The new rule reads as follows:

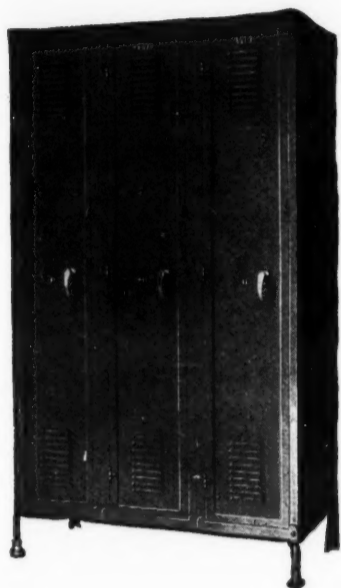
The requirements for the certificate are: the degree of master of education, master of arts, or equivalent degree, from a college, or university approved by the board of superintendents shall be two years' successful experience in teaching and governing regular graded day schools, which experience shall include at least one year in a day high school or a day intermediate school. One year's experience in teaching will be allowed holders of the degree of master of education of the City of Boston, and holders of the degree of master of education from a college or university approved by the board of superintendents, which grants the degree only upon the completion of two years' work under the particular institution.

—Davenport, Iowa. The school board has been asked to approve a proposition, calling for an election to vote for a system for superannuated teachers of Davenport. Funds for the pension system will be derived from two sources, from a direct tax levy, and from contributions of teachers and others eligible under the pension system.

—Columbia, Pa. Steps have been taken toward the establishment of the Lloyd Mifflin Memorial Home for Teachers. The first unit of the home, which will be opened July 1, will be erected at a cost of \$50,000.

—Youngstown, Ohio. The school board has voted to discontinue the employment of married women teachers, with the opening of the schools next fall.

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INSTRUCTION AND PLANT OPERATION AS CONSTANT COSTS

(Continued from Page 42)

penditure reveals the rather remarkable constancy with which instruction takes a given proportion of the total cost. Where the school program becomes large enough to cost between \$60 and \$100 per pupil, the proportion of total current cost devoted to instruction remains significantly constant in the 42 city-school reports studied.

Practical Value of Data

If these empirical data are even approximately true for conditions generally, the obvious immediate practical application of the facts is that, whenever comparisons of expenditures are to be made, school surveys, city superintendents, school business managers, and other students of school costs should group cities not

TABLE II
RATIOS BETWEEN DIFFERENCE OF MEANS AND THE PROBABLE ERROR OF THE DIFFERENCE OF THE MEANS OF THE PER CENTS OF TOTAL CURRENT EXPENSE ALLOTTED TO MAJOR ITEMS OF SCHOOL OPERATION IN ALL CITIES WHEN SIZE IS DISREGARDED.

Per pupil cost in the Groups Compared	Ratios		
	Instruction	Operation	General Control
(1)	(2)	(3)	(4)
(\$ 20-40) - (\$ 40-60)	6.92	- 8.46	4.98
" - (\$ 60-80)	11.94	-14.54	13.87
" - (\$ 80-100)	17.94	-17.94	27.04
" - (\$100-120)	11.48	-11.64	23.79
" - (\$120-plus)	8.56	- 9.39	13.64
(\$ 40-60) - (\$ 60-80)	5.73	- 5.58	3.19
" - (\$ 80-100)	7.26	- 8.71	3.84
" - (\$100-120)	5.76	- 3.44	5.79
" - (\$120-plus)	5.01	- 4.60	5.00
(\$ 60-80) - (\$ 80-100)	1.23	-3.72	1.26
" - (\$100-120)	.78	- 1.72	3.52
" - (\$120-plus)	.33	- 1.47	3.08
(\$ 80-100) - (\$100-120)	.46	4.78	5.46
" - (\$120-plus)	.63	.16	5.02
(\$100-120) - (\$120-plus)	.23	- 2.34	1.00

1. Ratio of 3 or above indicates differences significant.
2. 442 Financial reports of Cities, 1923-24, and 1925-26.

total cost allotted to operation are found between the groups with costs of \$20-40 and \$40-60 and every other group. With one exception, these differences disappear when the per-pupil cost passes the \$60-80 bracket. This is wholly true for the various cost groups within every one of the individual population groupings, except the largest cities of 100,000 population and over. These facts are shown in Table III, and they suggest the conclusion that costs of operation tend to become a relatively fixed proportion of the total cost, whenever the school program becomes large enough to cost from \$60-80 per pupil and over. Figure 2 shows clearly this tendency for operation cost to cluster around 11.5 per cent when the per-pupil cost reaches \$60-80.

The cost of general control is less clearly stabilized as a proportionate cost than is the

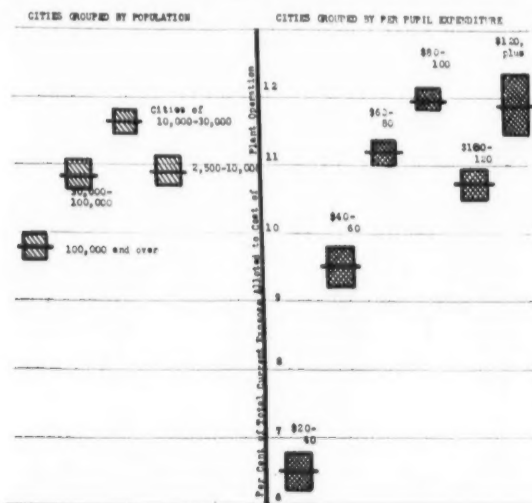


FIG. 2. THE PROPORTION OF TOTAL CURRENT EXPENSE ALLOTTED TO COST OF PLANT OPERATION IN AMERICAN CITIES

only according to the size of the population, but also according to the size of the amount expended per pupil. If only one classification is to be made, the latter one is probably the more significant.

Data for some major school functions other than instruction, yield similar results when the method here indicated is used. Table II, column 3, shows that, when school systems are grouped according to size of the city, the proportions of total cost allotted to cost of plant operation are significantly different between the group of large cities over 100,000 population and every other group. Between the other three groups there are no significant differences.

When the school systems in cities of all sizes are classified according to the amount of money expended per pupil, (Table II, column 3) the significant differences in the mean per cent of

TABLE II

(Concluded on Page 126)

TABLE III
RATIOS BETWEEN DIFFERENCE OF THE MEANS AND THE PROBABLE ERROR OF THE DIFFERENCE OF THE MEANS OF PER CENTS OF TOTAL CURRENT EXPENSE ALLOTTED TO PLANT OPERATION IN CITIES OF SAME POPULATION GROUP BUT DIFFERENT PER PUPIL COST.

Per Pupil Cost in Groups Compared	Cities of 100,000 and over	Cities of 30,000 to 100,000	Cities of 10,000 to 30,000	Cities of 2,500 to 10,000
(1)	(2)	(3)	(4)	(5)
(\$120-plus) - (\$100-120)	2.23	-1.19	1.68	7.65
" - (\$ 80-100)	1.25	-2.13	.07	1.01
" - (\$ 60-80)	3.03	-1.00	1.71	2.54
" - (\$ 40-60)			2.58	3.39
" - (\$ 20-40)		2.64	6.49	5.27
(\$100-120) - (\$ 80-100)	-3.03	-2.10	-2.72	-1.06
" - (\$ 60-80)	1.56	.33	- .21	-1.26
" - (\$ 40-60)		0.56	1.28	.11
" - (\$ 20-40)			10.24	2.30
(\$ 80-100) - (\$ 60-80)	2.46	2.46	3.44	1.37
" - (\$ 40-60)		2.79	4.26	5.27
" - (\$ 20-40)			15.97	12.92
(\$ 60-80) - (\$ 40-60)		0.98	1.78	3.69
" - (\$ 20-40)			13.67	12.67
(\$ 40-60) - (\$ 20-40)			9.94	6.57

TABLE III

DURABILT STEEL LOCKERS

Beautify School Corridors



Durabilt Steel Lockers Recessed in Corridors.
Central Catholic High School, Toledo, Ohio.

Among the many prominent schools where Durabilt Steel Lockers are used, the Central Catholic High School in Toledo is another example of what can be accomplished by giving utmost consideration to every detail of design and the selection of equipment to harmonize with a carefully planned interior color scheme.

When selecting steel lockers for their beautiful corridors—those responsible for the purchasing went into the subject very thoroughly.

A color for the lockers was selected that would add lasting charm and beauty. Careful consideration was also given to the details of construction, which, in a locker, exert a definite influence on the service an installation will render over a period of years.

Durabilt Steel Lockers met with approval from every point of comparison and the lockers now installed and in use are a constant affirmation of the wisdom exercised in making their selection.

Many more of America's finest Schools, Colleges and Institutions have found that Durabilt Lockers have added much to the appearance, utility and durability of their locker equipment. Your school will have all these advantages with a Durabilt installation.

Hundreds of discriminating buyers call on us regularly for advice and help in planning their locker installations and a Durabilt Sales Engineer is available to assist in the preparation of locker plans and specifications that will insure a satisfactory installation for you.

Should you be contemplating the purchase of locker equipment for installation in the near future, now is the opportune time to order before the summer rush starts.

Send in your plans and specifications for a quotation; or, if you desire further information, request our fourteen-page locker folder No. 6000. This will place you under no obligation. Phone our nearest Sales Office or write us direct at Aurora.

No better built than Durabilt

DURABILT STEEL LOCKER CO.

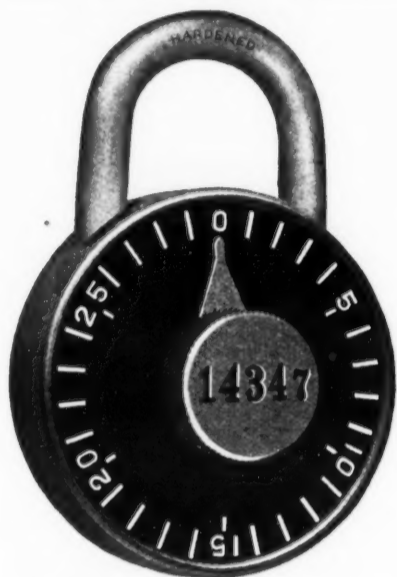
400 ARNOLD AVE.,

Sales Offices in all Principal Cities

AURORA, ILL.

They Came—They Saw—They Conquered!

FROM Arizona, Texas, the Pacific Coast, Washington, Nevada, Missouri, Ohio, Illinois, North Carolina, West Virginia, Alabama, New Jersey, New York, Massachusetts, Connecticut, Pennsylvania, Delaware, in fact from every section of this great country, hundreds of school officials attending the National Education Association, Department of Superintendence convention at Atlantic City, visited the display of the Barrett Keyless Lock.



PATENTED
THE BARRETT KEYLESS LOCK

THEY CAME—Seeking relief from their annoying lock problems.

THEY SAW—And expressed satisfaction at finding that the Barrett Keyless Lock cannot be turned back onto combination by a slight turn of the knob after it has been locked. That it cannot be left on combination, it being necessary to distribute the tumblers in order to make it secure. **THEY SAW**—that the Barrett Keyless Lock cannot be turned off combination while open. That it has no springs of any description to break or fail to function. That it cannot get out of order. That it has a Case hardened bolt and shackle. That it is rust proof throughout and that it eliminates all of the objectionable features found in other locks.

THEY CONQUERED their biggest problem by deciding that the Barrett Keyless Lock is the real answer to that problem, and that its installation would bring a permanent end to their lock worries.

As a result, Barrett Keyless Locks will be found in schools in all sections as rapidly as deliveries can be made.

You, too, can end your lock worries. A personal inspection will convince you. Send for a Free sample today. Let the Barrett Keyless Lock prove its superiority to you. Dials made up of school color combinations, introduced for the first time by Barrett at Atlantic City, may be selected instead of standard Black and White dials.

—The Lock You Have Hoped For—

BARRETT LOCK COMPANY

4720 North Eighteenth Street

Philadelphia, Pa.

(Concluded from Page 124)

cost of either instruction or operation, although the per cents show a distinct tendency to cluster around 4 per cent where the per-pupil cost passes the \$60-80 bracket. Figure 3 shows this

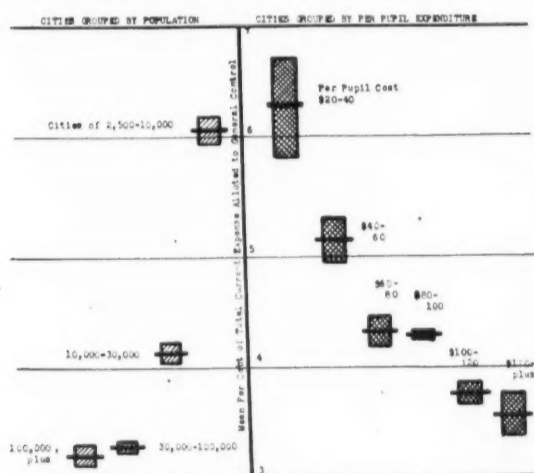


FIG. 3. THE PROPORTION OF TOTAL CURRENT EXPENSE ALLOTTED TO COST OF GENERAL CONTROL IN AMERICAN CITIES

fact graphically. Column 4 of Table II shows this greater tendency for the proportionate cost of general control to be different among cost groups. The mean percentage of total cost devoted to general control increases regularly from 3.24 in cities over 100,000 to 6.06 in the smallest cities. The mean percentage decreases regularly for systems as a whole from 6.26 when the per-pupil cost is \$20-50 to 3.55 in the group with a per-pupil cost over \$120.

The method of per-cent analysis, like any other single device, cannot tell all kinds of facts, and it needs always to be supplemented with other studies of a unit-cost nature in order that the differences which it reveals may be

justified or explained. The method will assist the school administrator in "balancing" competing requests for funds at the time the budget is made, and it will reveal the places of unusual cost when past practice is analyzed. It will also show trends over a period of years. And, in every case, it adds its quota of information to provide the necessary fact basis for the determination of sound educational plans and policies. The extension of the method as used in this study, shows the distinct tendency for two major items of school cost to take constant proportions of the total cost, and it suggests by reason of these facts a possibility for the establishment of practical norms in the field of school-budget distribution.



MARTIN G. BRUMBAUGH
Died March 14, 1930

THE LATE MARTIN G. BRUMBAUGH

One of the most picturesque figures in the educational field, Martin G. Brumbaugh, of Pennsylvania, died on March 14 at the age of 68. He had risen from the position of a modest schoolmaster to the governorship of a great state.

It was while he was instructor in the University of Pennsylvania, that he began to command attention in the educational field. His vigorous personality, charming as well as incisive manner of discussion, and his progressive leadership in educational circles, soon won great popularity for him.

He became the superintendent of the Philadelphia schools, and wielded a great influence among the educators of the state. His popularity eventually swept him into the gubernatorial chair.

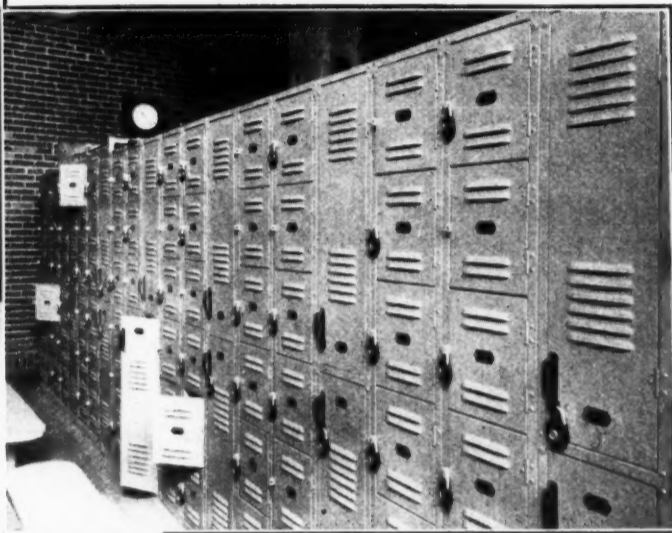
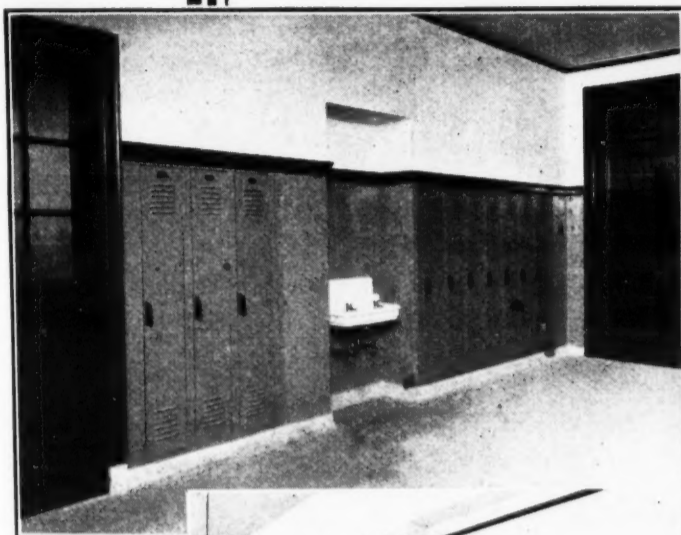
It is said that as a politician he was not a success. His idealism went on the rocks, and when he retired from office his prestige as a statesman was impaired. He continued his educational labors, however, until the day of his death.

Mr. Brumbaugh was a native of Pennsylvania and was proud of his Dutch-Pennsylvanian ancestry. He was a contemporary of the late Nathan C. Schaeffer, for many years state superintendent of Pennsylvania, who was of the same ancestry. Brumbaugh was fond of introducing himself before an audience by saying: "I am a Pennsylvania Dutchman, and if I were to be anything else, I would be another Pennsylvania Dutchman!"

The passing of Dr. Brumbaugh removes from the educational life of Pennsylvania one of its most ardent and enthusiastic workers. His life's story is characterized by useful service, and in its entirety is typically American.

—The commissioner of motor vehicles of Connecticut has rule that, "A. Capacity for bus or truck while engaged in transportation of school children will be based on an allowance of one hundred (100) pounds per child carried. B. Seating capacity for bus or truck while engaged in transportation of school children will be figured on an allowance of fourteen (14) inches per child (face of seat)."

For Corridor Classroom or Gymnasium




FOR THE CORRIDOR: the single tier full louver locker recessed into the wall furnishes ample space for the students' coats and hats and other bulky articles.

FOR THE CLASSROOM: recessed box compartment lockers provide for the storage of books, lunches and personal belongings. Ideal when classes are confined to one room for all studies.

FOR THE GYMNASIUM: the double tier locker combined in an installation with the box compartment allows the private, safe storage of gym and athletic suits. Berloy has also developed a basket rack for this same purpose.

Write us today for information and aid on your locker problem.


BERLOY
 SUPREMACY IN STEEL
**STEEL
LOCKERS**
 for Schools

THE BERGER MANUFACTURING CO.

MAIN OFFICE CANTON, OHIO

BRANCHES

Boston
Chicago

Detroit
Los Angeles

Minneapolis
Cleveland

Pittsburgh
New York

Philadelphia
Toronto

The Department of Superintendence at Atlantic City

(Continued from Page 56)

greater advantage must be taken of new experiments, new methods, new types of testing and remedial teaching. There must be objective criticism coupled with a scientific evaluation of all phases of schoolwork.

Dr. J. B. Edmonson, dean of the School of Education of the University of Michigan, briefly indicated twelve important ways in which school administration has become more professionally effective. The cause of this improvement is largely based on the better professional service which superintendents are rendering and which has resulted in the higher social, professional, as well as economic status of the superintendent.

Dr. N. L. Engelhardt followed with an encyclopedic review of improvements in the school plant. Dr. C. B. Glenn showed briefly how the personnel of the schools, which has vastly improved in initial training and in growth in service, is at the base of all school progress. Supt. Frank W. Ballou, of Washington, reviewed the growth of the problem of school finance due to higher costs of the schools, the broadening of their service, and the reduction in the buying power of the dollar. The meeting was closed by Supt. Francis G. Blair, of Illinois, who argued that the safety of our economic situation depends upon the further growth of education.

The Tuesday Discussion Groups

On Tuesday afternoon the Department broke up into twelve group meetings. Two of these took up the problems of the schoolhouse plant, one limiting itself to the plan and construction of buildings and the other to the operation and maintenance of schoolhouses. The group presided over by Deputy Superintendent H. W. Anderson, of Denver, discussed scientific school-plant service, scientific educational planning of school buildings, and scientific methods of developing school-building programs. The speakers were inclined to emphasize theoretical and large-city conditions and offered little of practical value for the superintendent in the smaller town. The most practical paper read was that of Mr. John A. Sexson, superintendent of schools at Pasadena, who discussed recent tendencies in school equipment. In contrast to this session the group on school-plant operation and maintenance limited itself to a very concrete and useful discussion. Supt. H. L. Belisle, of Fall River, Mass., described a plan for janitor service; Supt. T. W. Gosling, of

Akron, Ohio, discussed the advisability of excessive expenditures for plant maintenance; Supt. E. N. Child, of Salt Lake City, argued that the educational function of the school plant must be maintained.

The Pageant

On Tuesday evening the convention was favored with "The Pageant of Time," an adventure of education in the realm of leisure. More than 1,300 men, women, and children, representing the pupils of Atlantic City, members of the Atlantic City teaching staff, and children and pupils from various parts of New Jersey, presented the stupendous spectacle.

The Wednesday Sessions

Hon. Raymond Lyman Wilbur, Secretary of the Department of Interior, Washington, D. C., was the chief speaker at the eighth session on Wednesday morning. Dr. Wilbur showed that while enormous progress has been made in many aspects of human existence, there has been no change in the genuine fundamentals of life. Man is no more brilliant a thinker today than he was in the times of Solomon or of the Greek philosophers. By mass action, by mass education, and by transmitting from one generation to the other the accumulated store of knowledge, we have been enabled to favor the many rather than the few. We are filling the earth because we are increasing our food supply and are reducing distance to the minimum. At present we are experiencing a vast change in governmental organization. Several types of democracies are battling for supremacy over the older monarchical and representative forms of government. In this vast upheaval it is the duty of the educator to harmonize the practice of democracy with the facts of science. Democratic government is usually a compromise between principals and interests and policies. Science has only one rule—that of truth and facts and the eternal laws. Majorities may legislate on a compromise basis, but they can never change the eternal truth of things. Dr. Wilbur was frankly critical of many present-day policies in education. He raised the question concerning the wisdom of excluding religion from education when it is a fact that in all the long history of humanity, character has depended upon religion and the great moral leaders have been men of religion. He argued that it is un-

wise to give all children an equal amount of education, when they are intellectually unable to make use of it. Democracy requires equal opportunity not an equal amount of education which the innate ability of the individual cannot utilize. We have failed to adapt our education of the Indian and Filipino peoples to their needs and abilities, but have insisted upon imposing upon them a type of instruction with an Anglo-Saxon and Puritanical background. Education, he concluded, must be willing to drop old methods and old precedents; it must go on with new ideas; it must not be allowed to crystallize. Research must be the basis of advance. The vast democratic machinery of the nation is in danger of collapse unless there is better, wiser leadership.

The Wednesday Afternoon Sessions

Educational progress through supervision was the subject matter of at least six of the discussion groups which met on Wednesday afternoon. In the group for cities with a population of less than 10,000, Dr. Fred C. Ayer, of the University of Texas, described how supervision has grown from the haphazard stage by the use of genuinely scientific methods and procedures. Studies in several hundred cities, conducted by Mr. Ayer, show that the improvement of classroom instruction is based directly upon well considered, systematic, and organized supervisory methods.

The Thursday Morning Session

The ninth session on Thursday morning indicated methods and agencies through which the school is being aided from the outside. Dr. John H. Finley showed conclusively that the newspaper has become the vastly important constructive agency for improving instruction. Mrs. L. T. DeValiere described the aid which the parent-teacher associations are giving to the schools. Dr. J. E. West of the Boy Scouts was rather disappointing in limiting his discussion of social agencies which aid the school to a laudation of his organization. The meeting was closed by Dr. Walter J. Jessup with a discussion of the growth of education and its debt to its friends. The school owes an enormous debt to its friends which it must discharge in doing its job well. The great danger at present is standardization of education which will prevent improvement, growth, and the development of new ideals and new methods. The school must cooperate with the religious, social, and economic agencies that exist in the community.

The final session of the convention was the Grand Concert by the National High School Orchestra. The latter half of this concert was directed by Walter Damrosch.

The Growth of the High School

It was impossible to sit through the meetings of the convention without being impressed with the growth of the high school. Secondary education in recent years has not only broadened and enriched its service; it has reached down into the grade schools to take to itself the seventh and eighth grades; it has reached up into the college to include the first and second years of college work as an integral part of itself. The high-school men, as represented by the Secondary School Principals' Association and other groups, gave clear evidence that in numbers, cost, influence, scope, and dynamic activity the high school is going forward at a pace that will soon outdistance both the elementary schools and the university.

The Business Sessions

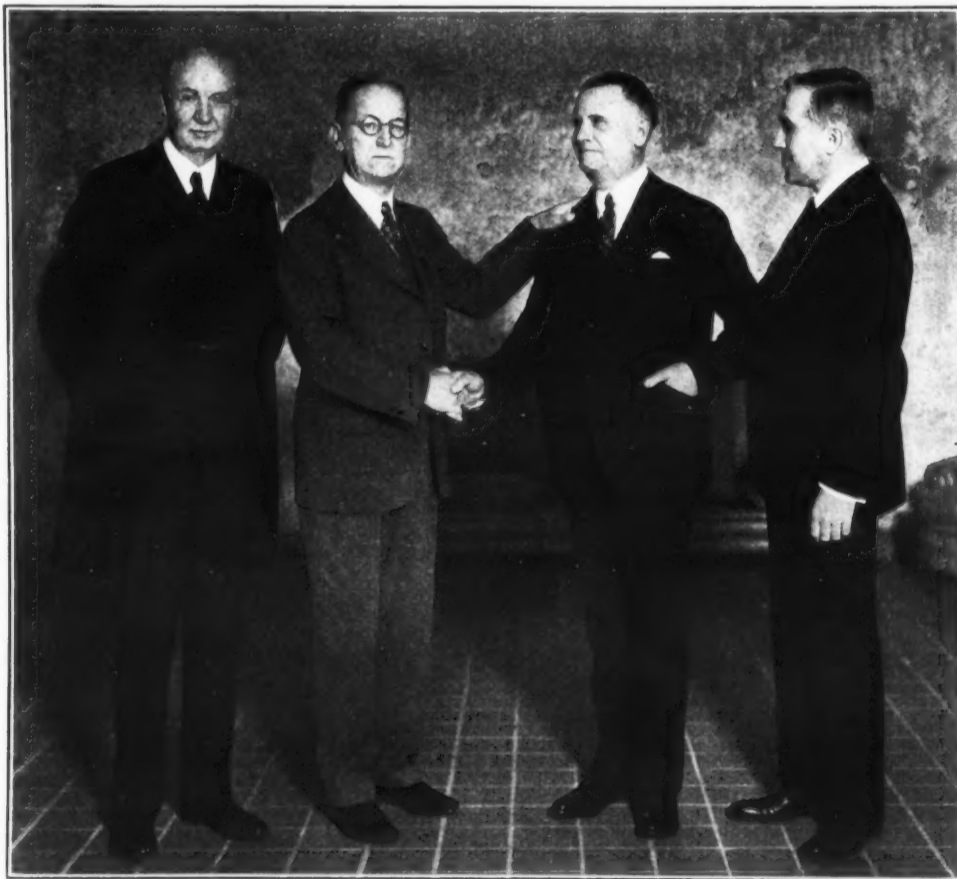
There was less than ordinary interest in the business affairs of the Association. The only contest was for the vice-presidency. Supt. Daniel S. Kealey, of Hoboken, N. J., and Mr. F. M. Longanecker, of Racine, Wis., were the opposing candidates. The election showed the following officers elected:

President, Norman R. Crozier, superintendent of schools, Dallas, Tex.; vice-president, ex officio, Frank Cody, Detroit, Mich.; second vice-president, Daniel S. Kealey, superintendent of schools, Hoboken, N. J.; member of the executive committee, Dr. C. B. Glenn, superintendent of schools, Birmingham, Ala.

The Department will continue its efforts to raise a fund for research in school administration. The resolutions provide the following departures in problems and viewpoint from previous annual resolutions:

1. We approve the plans for cooperative research now being developed in the U. S. Office of Education. We believe that the policy of uniting existing professional agencies for the periodic study of education

(Continued on Page 131)



FOUR LEADERS AT ATLANTIC CITY

Augustus O. Thomas, Supt. C. B. Boyer, President Frank Cody, and Secretary S. D. Shankland

1855 • SEVENTY-FIFTH ANNIVERSARY • 1930

An important contribution to "America's Triumphant School Architecture"

In a splendid editorial in the *American School Board Journal* for January, the editor, after acknowledging the debt American architecture owes Europe, writes, "America is giving the world the most magnificent expression in school architecture . . . buildings that demonstrate an amazing development in planning and mechanical equipment."

Crane Co. is proud to have had some share in this achievement. For the past 75 years it has dedicated itself to the evolving of piping, plumbing, and heating materials. How well it has succeeded is witnessed by the



The long line that forms at drinking fountains during class intermissions can be speeded by the use of this dependable Tyrone drinking fountain, C 9031.

present development of building in America, and by the vast number of structures that are being served—and well served—by Crane materials.

During this time, Crane designers and engineers have studied school needs intensively. These studies have borne fruit in a line of plumbing and heating materials that for school plants is complete in every detail; and in the invaluable experience Crane Co. places at the disposal of school boards who are building, or remodeling.



CRANE



CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK OFFICES: 23 W. 44TH STREET

Branches and Sales Offices in One Hundred and Ninety Cities

G&G
G&G

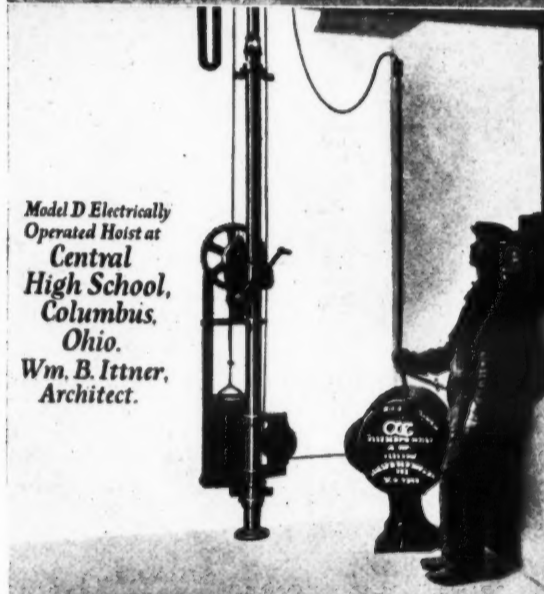
Ash Removal

Labor Saving. Safe. Speedy. with



The **G&G** Telescopic Hoist

Model D Electrically Operated Hoist at Central High School, Columbus, Ohio. Wm. B. Ittner, Architect.



Best insurance against accident

And many years of service at very low cost

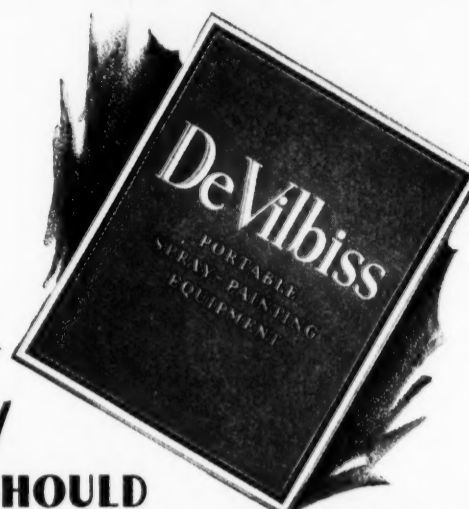
MORE than 1900 schools are G&G equipped. Schools must be free from accident-traps. Note how the G&G sidewalk doors and spring guard gate fully protect the sidewalk opening. The doors lock automatically when open or closed. Nothing is left to chance.

Note also the extreme simplicity of this arrangement. Two men easily and quickly do the work of 5 or 6. There is no confusion, no needless noise. The overhead crane model illustrated permits ash truck to drive up alongside of hoistway. There are also G&G "one-man" models, both hand-power and electric, for use where cans must be removed across sidewalk to curb. Sturdy construction assures years of hard service. Electric models use surprisingly little current. Complete details on request.

Your architect has our Catalog on file

GILLIS & GEOGHEGAN
551 WEST BROADWAY NEW YORK

G&G
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Why

YOU SHOULD READ AND KEEP THIS CATALOG

THIS new DeVilbiss catalog is an illustrated record of the tremendous recent advances made in the spray painting equipment industry, many of which apply to your particular problem.

This catalog presents many examples of improved spray painting equipment especially applicable to building maintenance. Knowledge of these outfits will enable you to save money on all painting operations. We will gladly send you this catalog.

THE DEVILBISS COMPANY - 268 PHILLIPS AVENUE - TOLEDO, OHIO

SALES and SERVICE BRANCHES

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DeVilbiss

Spray-Painting System

Direct factory representatives in all other territories

- Indianapolis
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THE FLOOR SURFACER SUPREME

Removes paint and varnish by electricity. Makes old floors like new without using varnish remover. Does more and better work than 6 men scraping by hand. . . .

Built-in vacuum cleaning system eliminates dust and dirt.

Weights only 115 pounds.

A man can carry it—
a woman can run it. . . .

MAKE your OLD FLOORS look like NEW

THE NATIONAL
(Electric)
LITTLE BRUTE
7" roller

Costs only \$147.⁵⁰

Other sizes:

- Model A \$265
(12" sanding roller)
- Model E \$225
(9" sanding roller)
- National, Jr. \$95
(3" sanding roller)



THE NATIONAL JR.

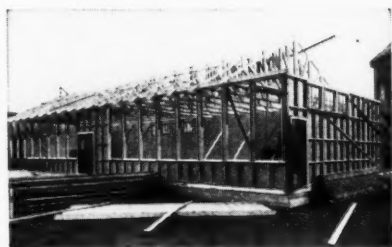
The ideal cleaning machine for re-surfacing closets, stairs, furniture, etc. Catalog on request. . . .

You can buy almost 2 Little Brutes for the price of any other floor surfacer. Why not save the difference?

National Sanding Machine Co.
4351 Avondale Avenue Chicago, U. S. A.

HARRIS UNIT-BUILT SCHOOLS

Safe-Modern-Economical



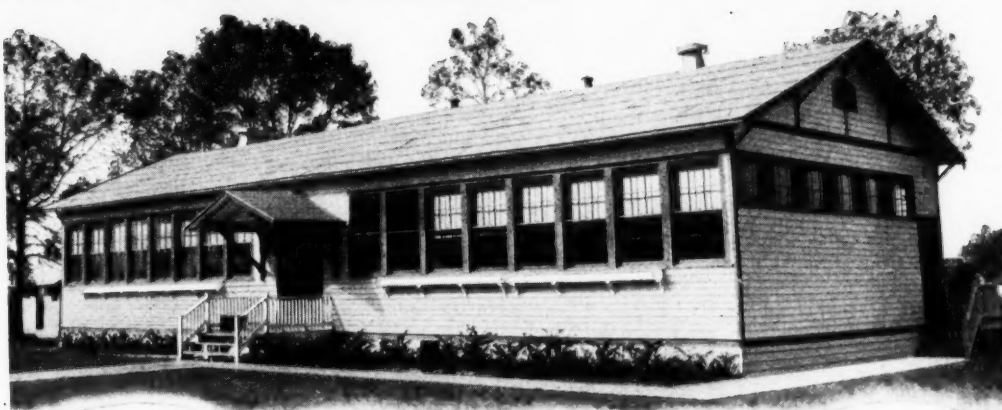
Framed and Braced for Super Strength



Snug, Light and Well Ventilated Classrooms



Schools in All Sizes to Meet Every Community Need



America's Standard in School Housing

Harris Schools are designed and manufactured by America's largest producers of sectional buildings, an organization foremost in the Building and building material industry for over 35 years. Embracing all the requirements of a modern building—proper light distribution, perfect ventilation, sanitation, and safe construction are all an integral part of every Harris School, yet they are low in cost.

Our Standard Designs accommodate 40 to 400 pupils and offer the most satisfactory solution of your housing problem in the most economical way.

FREE BOOK on SCHOOL CONSTRUCTION!

—beautifully illustrated, showing designs and plans of some of the Schools recently erected by Our Experts together with complete Specifications of Materials and Construction of all Harris UNIT-BUILT Schools.

HARRIS BROTHERS CO.

NEW YORK

1349-1525 West 35th Street, CHICAGO, ILL.

DETROIT

(Continued from Page 128)

problems under the immediate leadership of the Office of Education will result in greater educational advance than a policy of building a large technical and permanent staff at Washington.

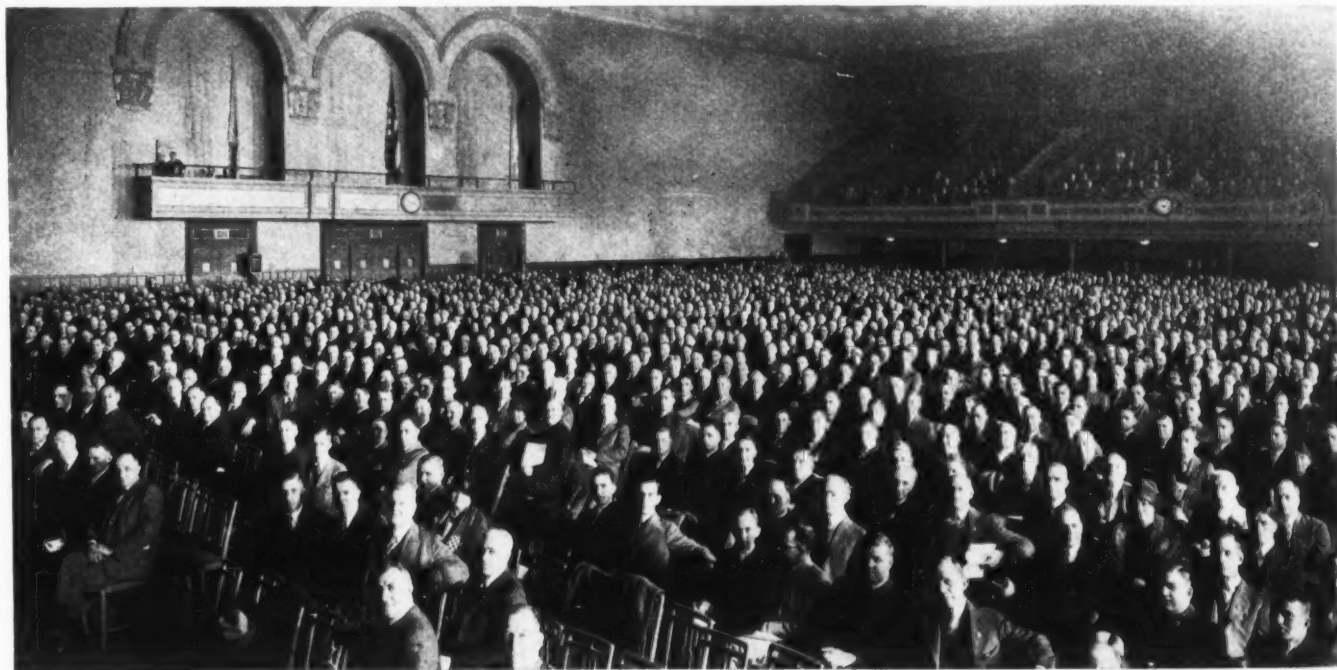
2. We believe that the subject of school accounting, especially financial accounting with the related administrative corollaries including the cooperative development of a superior federal system of statistical and informational service, is of fundamental significance in the solution of any educational problem. Therefore, we respectfully urge that Congress make an adequate appropriation for a period of years; first, for a comprehensive study and the scientific development of basic reports to the U. S. Office of Education, and second for a thoroughgoing study of public-school finance—state, county, and local—such studies to be carried on under the direction of the U. S. Commissioner of Education.

3. We recognize in the radio a new and powerful instrument of education of far-reaching importance. We view with deep interest the experiments now being made to develop programs which shall enrich and supplement the work of the schools in many directions. If these programs are to be accepted by teachers and school officials, they must, however, be free from all advertising, commercial and propaganda features. They must successfully meet the same impartial tests as textbooks, being wholly in the interest of public welfare and with the approval of responsible school authorities. Moreover they must be closely related to the regular programs of classroom instruction. In order that these ends may be met, radio instruction must be developed and directed by school officials, working in cooperation with local and national broadcasting companies and with state and government agencies providing such service for the schools. We accordingly recommend that the executive committee be authorized

and directed to appoint a radio commission who shall be empowered to present to the radio corporations the points of view which should prevail in the development of educational programs.

The Exhibits

The Department is becoming increasingly conscious of the fact that the annual exhibits of textbooks, teaching materials, furniture, school-building equipment, and other accessories have a distinctly professional value. The Atlantic City exhibit exceeded in scope and size that of any previous convention. It was not merely a rehash of older exhibits. There were numerous devices which have never been seen before and which deserved the closest possible study on the part of superintendents, principals, and school-board officers. To mention merely the sound pictures and the new



THE DEPARTMENT OF SUPERINTENDENCE IN SESSION AT ATLANTIC CITY, TUESDAY, FEBRUARY 25, 1930



Serving Successfully in Scores of Schools

Here are a few users

Harvard University Chemistry Bldg.,
Cambridge, Mass.

Washington State Normal School,
Ellensburg, Wash.

Bass Junior High School,
Atlanta, Ga.

Linnfield College,
McMinnville, Ore.

Little Rock High School,
Little Rock, Ark.

University of Detroit,
Detroit, Mich.

**We Will Gladly Refer
You to Others**

HARVARD University Installed a North "ALL-RELAY" Automatic Telephone System in 1928 in the new Mallinckrodt Chemistry Laboratory. A year later a second and larger North System was installed in the New Law Building, Langdell Hall.

North "ALL-RELAY" Automatic Telephone Systems can be suited exactly to the needs of all schools, small or large—to YOUR needs.

INSTANT communication—no operator needed—efficient code call, conference and monitor provisions—privacy—24 hour service—simplicity—dependability—these are some of the things a North "ALL-RELAY" Automatic Telephone System offers you.

We will gladly furnish further facts.

THE NORTH ELECTRIC MFG. CO.

ESTABLISHED 1884
GALION OHIO



school-radio installations is to touch upon only two types of educational aids that attracted wide attention. There were 252 exhibitors in the large exhibit section of the Atlantic City auditorium.

It is to be hoped that the exhibitors' organization, which seems to have gathered considerable power, will understand and grasp the opportunity of working coöperatively with the officers of the Department, so as to increase to the maximum the educational service which the exhibits must render to deserve the attention of superintendents and other school executives.

THE HICK SUPERINTENDENT AT ATLANTIC CITY

(Continued from Page 68)

Continuing the theme of friendliness, Mrs. Edith B. Joynes, President of the Department of Classroom Teachers of the National Education Association made a plea for friendliness in pupil-teacher relationships and urged teachers to develop a sense of humor, to see things as pupils saw them, even going so far as to read "the funnies" in order to get the child's outlook on the important things of life.

Father J. Elliot Ross, Catholic Professor and Associate Administrative Director, School of Religion, State University of Iowa, speaking on the topic "Friendliness in Relationships Between Public and Parochial Schools" delivered what will probably prove to be the most far reaching address of the convention. Pointing to various causes of misunderstandings and possible friction, Father Ross said: "Try to make plain that the public schools are really public, in the sense of belonging to the whole public—Catholic, Protestant, Jewish, and unchurched. An implication from this is that properly qualified Catholics have the same right to teach in public schools that anyone else has."

The department of rural education under the leadership of Miss Mabel Carney presented the best program of its entire eleven years of existence. The study of rural education this year was elevated to its place on the plain of rural sociology.

Dr. Edmund de S. Brunner, speaking on critical conditions confronting country life today, delivered an address which every rural-school worker in the nation should have heard. He said in part: "The rapid movement of events in the last 15 years has produced a number of changes in American rural life. Some of these changes have created critical situations that must be faced by those who serve the country."

"This century has seen a tremendous migration of people from farmstead and village to town and city. The music of the machine has been the Pied Piper drawing old as well as young. The rural people have become very decidedly a minority element in the national life and they must adopt the procedure of a minority group in their statesmanship."

"Partly because of this there has been a growing rural-urban conflict. Village and farm are realizing their identity of interest far more than in the past but rural and urban America are at opposite poles on many major national issues from the tariff to prohibition."



PRESIDENT CODY AND SUPT. DAVIDSON
OF PITTSBURGH

"The agricultural depression has aggravated this issue. Agriculture did not recover from the post-war deflation. Capital investment in farms shrank \$26,000,000,000, or more than 25 per cent, between 1920 and 1925 and has been declining slowly since that time."

"This has made more acute, in view of the rising standard of living, the inequality of funds for educational and social service in rural America as compared with urban. How can democracy give actual equality of opportunity to country people? Rural leaders, especially educators, as those most concerned, must answer this question."

"Finally there are a host of problems growing out of the urbanization of life. The radio, the press, the motion pictures on the social side, corporation farming, chain stores, bank and industrial mergers on the economic side tend to weaken the basic social idealism of rural America. These agencies of the 20th Century cannot be stopped, should not be, but the values inherent in American rural life must be conserved. America cannot afford to forget or lose her rural heritage."

But I have already written too much.

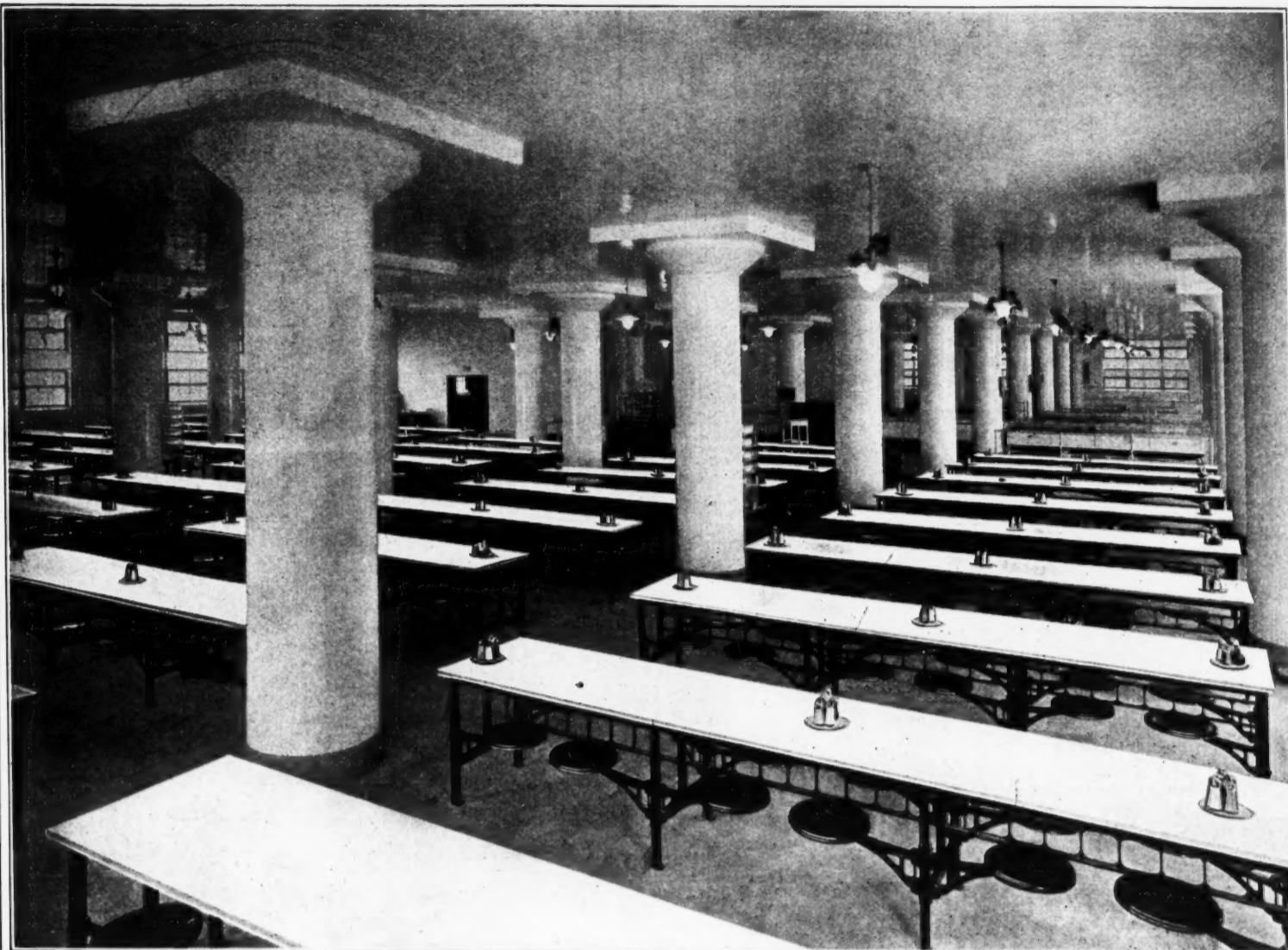
Space does not permit even mention of the hundreds of splendid papers heard during the week. The wonderful music which welcomed delegates at every session, the magnificent Pageant of Time, and the perfectly marvelous National High-School Orchestra all must be hurried past with mere mentioning, while the commercial exhibit, the greatest ever gotten together under one roof must be neglected entirely, in spite of the fact that these publishers and supply men play such an important part in the present day development of modern educational policies.

It was a great convention, a convention of friendliness, and a convention for the furtherance of education in the spirit of life.

Yours for happy rural schools,

Rusticus.

(Concluded on Page 134)



A large Cafeteria where the No. 314-T Sani-Products Table helps to save space and promote sanitation.

Sani Products 314-T Unit Table Saves Space . . . Promotes Sanitation

Because it does away with the need for chairs, Sani-Products No. 314-T Unit Table is a great space saver. At the same time its construction permits every inch of the floor space beneath the tables to be easily reached for cleaning, making the installation unusually sanitary.

Sani-Metal Table Bases are finished in black japan or white paint. Tops are regularly furnished in $\frac{3}{4}$ -inch flat surface Sani-Onyx, Molded Rubber or Linoleum. Made in following sizes:

One-Section Table, for seating four
Two-Section Table, for seating eight

Three-Section Table, for seating twelve
Four-Section Table, for seating sixteen
Five-Section Table, for seating twenty
Six-Section Table, for seating twenty-four

A remarkably fine table for cafeterias of all sizes, and one that is giving perfect satisfaction in a great many schools throughout the country. This table also is widely used by the U. S. Government. Write for catalog, prices, etc.

Sani Products Co.

Sales Organization of
Chicago Hardware Foundry Company

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A.S.B.J. 4-30

Sani-Products Co., Sales Organization of
Chicago Hardware Foundry Co., North Chicago, Ill.

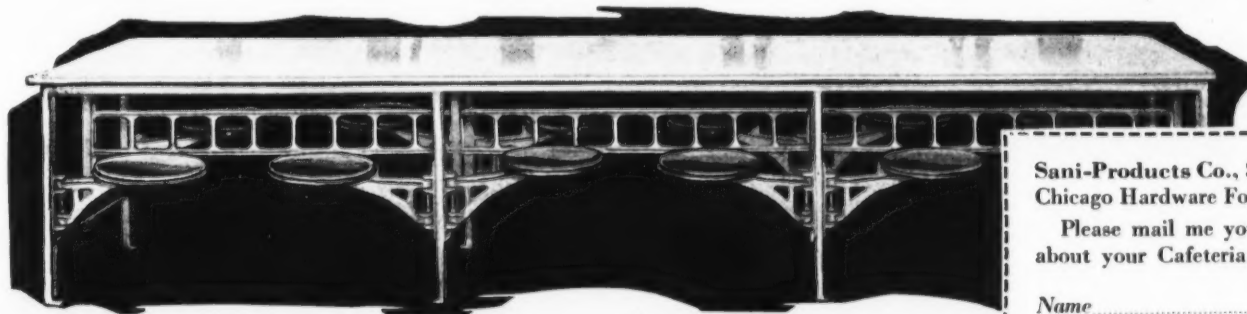
Please mail me your catalog and complete information
about your Cafeteria Tables for Schools.

Name

Title

School or Organization

City State



A Three-Section No. 314-T Cafeteria Table seating twelve, as used in the Cafeteria shown in large illustration above.

HOW SHALL WE PLAN OUR CAFETERIA

- to obtain the best layout
for our enrollment?
- to secure equipment that will
give long service?
- that will operate efficiently
and economically?
- that will be best suited for
our type of menus?

These are typical questions asked us every day by executives planning new school feeding installations.

Much of this information may be quickly obtained, through our Engineering Department, merely for the asking.

For complete service, send us a sketch with dimensions and data and we will gladly submit layout suggestions with estimates designed especially to meet your needs.

May we serve you?

The **CLEVELAND
RANGE
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519 HURON RD.

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ARMA COTE

ARMA-COTE

The Modern Wax for FLOORS

ARM-A-COTE is more than a wax as it does not track and mar. It is the easiest of all floor finishes to apply and maintain. The beauty of an ARM-A-COTE floor is superb.

ARM-A-COTE, the modern floor wax, will save in time, money and labor. Isn't this what you have been looking for for your school?

For wood, linoleum, tile, terrazzo and marble.

Sample sent upon request.

CHURCHILL
MANUFACTURING
CO.

Sioux City, Iowa.



THE RADIO TAKES ON EDUCATION

(Concluded from Page 41)

Survey or fact finding, Dr. H. Robinson Shipherd. Research, Dr. W. W. Charters, head of the Department of Educational Research, Ohio State University.

Ways and means, Dr. J. L. Clifton, Director Department of Education, State of Ohio.

Executive, the chairman of the commission, who is the Commissioner of Education, as chairman; Judge Robinson of the Federal Radio Commission, and the chairmen of the three subcommittees. Three major fields were to be examined:

- a) The elementary and high-school divisions.
- b) The university field.
- c) Adult education.

In the United States today, there are more than 500 radio broadcasting stations. Quite a large number of these stations are linked or grouped in "chains" so that a program presented in one station may be heard throughout the country. Many of the owners of the radio stations have shown their willingness to make accessible their stations without cost; that is, for a reasonable amount of time on the air for programs directed by school folk.

The commission, appointed by Secretary Wilbur of the Department of Interior, in answer to the questions as to whether it were desired that colleges, universities, and other educational agencies, and broadcasting stations should carry on with their educational plans or remain inactive until the report of the commission should be given to the public, gave the following answer, January 18, 1929:

"It is the opinion of the commission that no change in the plans of any of these broadcasters is called for, at least at present. The commission's relation to them will be to find out what they are doing and where possible, to measure the results they are getting. The commission was unanimous in the opinion that a report should be filed with the Secretary of the In-

terior not later than the first of January, 1930."

Since January 7, 1929, the Ohio State Department of Education has sponsored the School of the Air, under the general direction of Dr. J. L. Clifton, Director of Education, with Ben. H. Darrow, in charge. The Ohio School of the Air has been so successful that \$40,000 was appropriated by the state legislature to carry on for the next two years.

HYGIENE AND SANITATION

—The board of education of Memphis, Tenn., annually gives a prize to the school custodian who has the neatest and most attractive school grounds. A local newspaper editor says: "Well-kept grounds are essential. They add to the beauty of the city, but well-kept grounds deserve no prize if the man responsible for them has neglected to keep the school lavatories clean. Such a combination is like the housekeeping of a bachelor who sweeps the floor and hides the dirt under the carpet. Clean hands are essential to health and health is even more important than education. Soap and towels cost a lot, but they are worth it."

—Ionia, Mich. A total of 1,500 pupils were recently examined for dental defects. Of the total number, only about a hundred were free from defects. There were 4,000 teeth which disclosed cavities, more than 500 needed extractions, and many teeth were in poor condition and in need of attention. The conditions revealed pointed to the need of a dental clinic for children whose parents cannot afford to pay for treatment.

—The board of superintendents of the New York city schools has recommended that children be subjected to medical examination at least one year before leaving school. Physical defects are causing large numbers of children to be denied working papers and is resulting in the retardation of large proportion of those attending continuation schools, according to the report of the superintendents.

—A rule adopted by the board of education of Breckenridge, Texas, requires that before teachers and employees are engaged they be required to present certificates as to their health.

ANNOUNCE CHILD-HEALTH DAY

The observance of national child-health day on May 1, 1930, will center around the fathers and mothers of the United States. The national child-health day committee of the state and provincial health authorities of North America have chosen as the keynote of 1930, "Parent Cooperation in Community Child Health and Protection." Parents are asking to be drawn more closely into the health program, to be better informed on the subject of child health, to know what each group is doing in its field, and to find out how the work fits into the whole plan. Parents, by their cooperation, can make the results of the health conference practical in the life of the child, and can translate the ideal of May Day into child health, happiness, and success.

—Frank A. Bouelle, superintendent of the Los Angeles, Calif., schools, calls attention to the rules governing attendance at educational conventions. Applications must be sent to the superintendent and must be approved by the board of education. The rule reads: "All persons authorized to attend conventions with travel expenses paid by the board and who travel by railroad, will receive travel allowance based on the lowest railroad rate available to and from said convention, unless otherwise specifically authorized, it being understood that if an overnight trip is necessary, the use of a lower berth is included under the board's authorization for such travel allowance. All persons who travel by private automobile will receive allowance of five cents per mile for the "standard direct distance" by automobile road. If two or more persons travel in the same automobile, their combined allowance for transportation expense shall be at the rate of 5 cents per mile, but not to exceed the total lowest railroad fare that might have been secured by both or all of said persons. Hotel room is included at not to exceed \$5 per day. Meals may not exceed \$3.75 per day (average)."

—Plainview, Tex. The tax valuation for 1929-30 has been increased by \$1,000,000. There has been an increase of 18 per cent in scholastic values.

General Electric

brings economical refrigeration

to School

Lunch Rooms!

Of the hundreds of
thousands of owners of
GENERAL ELECTRIC REFRIGERATORS
not 1 has paid a cent
for SERVICE

IN the school lunch room—where food in quantity must be kept in the very finest condition—*unfailing* refrigeration is a necessity.

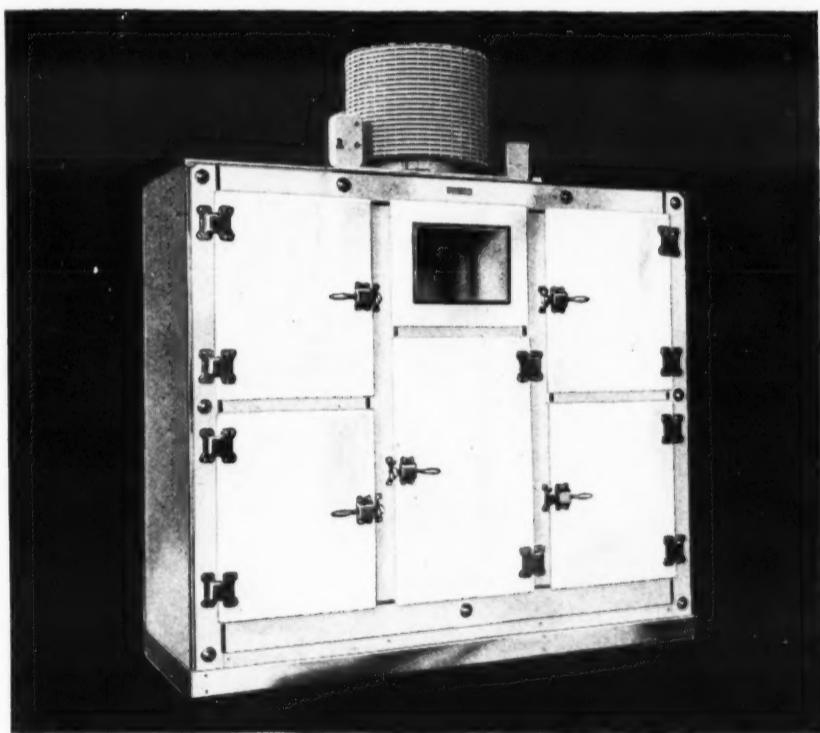
You want *electric* refrigeration, of course, but—more than that—you want the most *economical* refrigerator—the most *durable*

one—the one which will do its work so efficiently that you can turn it on and forget it.

If that's the kind of refrigerator you want, General Electric Refrigerators were *made* for you! They are *unfailing*, for the mechanism is designed and built to fit the cabinet, and the cabinet is designed and built to fit the mechanism. The entire mechanism with a *permanent* supply of oil is *sealed in steel*—safeguarded forever from moisture, dirt, and rust that cause trouble and repair bills. Defrosting is automatic.

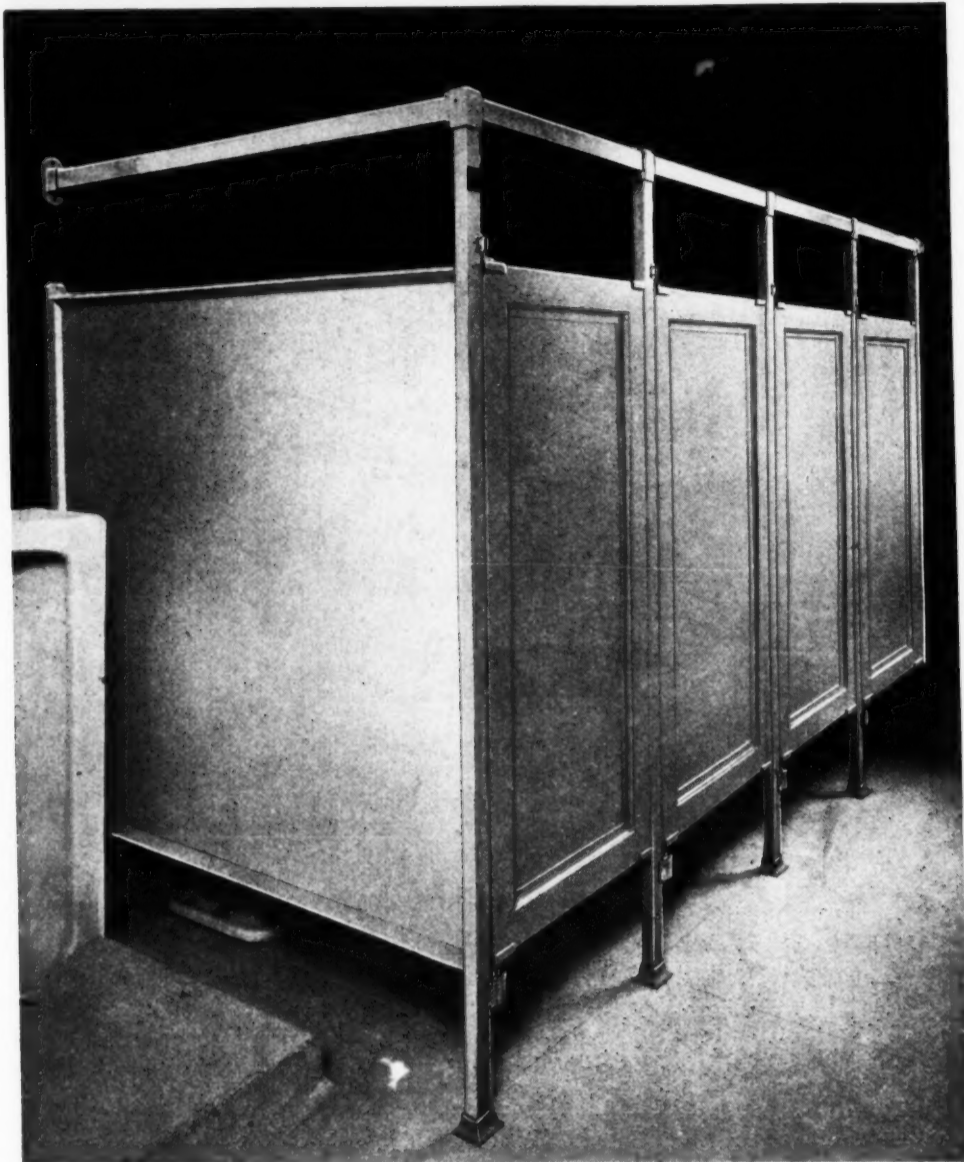
The General Electric Refrigerator keeps food and milk *safely*—well below the bacterial danger point—50° Fahrenheit. The white porcelain interior is easy to keep clean and sanitary.

This is the refrigerator with the chilling unit just the right size for the cabinet, so you will use only the amount of electric current necessary to keep your foods at the proper temperature. With a General Electric, you'll save in electric current bills, in food wastage and shrinkage, and in cost of repairs.



Ask us to send a specialist to discuss your particular requirements. Or write us for a catalog of commercial refrigerators. Address Section CK-4, Electric Refrigeration Dept., General Electric Co., Hanna Bldg., Cleveland, O.

GENERAL  **ELECTRIC**
COMMERCIAL REFRIGERATOR



Endurance ~ Plus

Shove! push! pound! . . . slam! bang! kick! . . . Think of the exuberantly thoughtless treatment your toilet compartments receive during recess and after-school hours! Only equipment built to bear these youthful bombardments will give lasting service and full satisfaction.

WEI STEEL Compartments are built entirely of copper bearing sheet steel, with electrically welded reinforcements at corner joints of doors—an exclusive feature. They come through all manner of rough usage unharmed.

Long life plus easy cleanability and pleasing appearance make WEI STEEL Compartments the most *practical* equipment you can buy. Low first cost and simplified installation features for easy, speedy erection—by your school maintenance staff, if you wish—make WEI STEEL Compartments the most *economical* you can buy. Send for complete information. . . . The HENRY WEIS MFG. CO. INC., Elkhart, Indiana.

WEI STEEL

WASHINGTON STATE SCHOOL-BOARD CONVENTION

The eighth annual meeting of the Washington State School Directors' Association was called to order at Olympia by President Z. B. Shay. One of the features was an address on the duties of the school director by Dr. E. O. Holland, president of the state college. "Public education," he said, "will go down unless the leading citizens of today are willing to pay the price of service to these schools."

One of the most important addresses was delivered by N. D. Showalter, state superintendent of public instruction. He dealt with the obligation of the state to provide adequate educational opportunity. He pointed out that, "it is not hard to see why costs of education have mounted up during the last nine or ten years. We are not only demanding more, but actually we are getting more for the money expended in education just now than at any other time during my experience in educational work. It can be said in general that the people approve these added educational facilities and are ready to pay for them, insofar as it lies within their power. And it is reasonably certain that the situation of *unfairness* and *injustice* will be corrected by the insistent demand of the people when the matter is fully known to them. In this lies the hope of the education of tomorrow, and upon this basis shall ever rest the guarantee of constitutional government and rights of all the people."

The association elected the following officers: President, S. Frank Spencer, Everett; East-side vice-president, O. M. Beatty, Walla Walla; West-side vice-president, Mrs. Iva Mann, Route 5, Tacoma. The following members of the Executive Committee for 1930-31 were appointed by the President and Vice-Presidents: Foster J. Pratt, Port Orchard; John Dobie, Route 8, Yakima; Mrs. Mary H. Garner, Centerville.

SCHOOL-BOARD CONVENTIONS

The Associated School Boards and Trustees of New York State planned the following section meetings: Section 5 at Huntington, April 7; section 3 at Oswego, April 10; section 4 at Saratoga

Springs, May 1; section 1 at Niagara Falls, May 5. President Raymond G. Jewett suggests four plans for the reduction of insurance costs of school buildings.

ADOPT SICK-LEAVE RULE FOR TEACHERS AT FRANKLIN, NEBR.

The new sick-leave plan which has been adopted by the board of education of Franklin, Nebr., is based on a policy which allows a definite time and a flat allowance for sick leave each year. Under the plan, teachers will be allowed five days sick leave on full pay each year. Certificated substitutes will be employed for vacancies of a day or more in length, at a wage of \$4 per day for elementary teachers, and \$6 for secondary teachers, the salaries to be paid by the school district. In case a teacher is absent longer than five days, the substitute's pay will be deducted from the teacher's monthly check.

Under the cumulative-leave principle, the days of sick leave available each year, but not used, may be added to those available in later years. For instance, if in the sixth year of service a serious illness is encountered, the teacher could be absent without loss of salary for 22 days; that is, for the 5 days allowed in the current year, plus the seventeen days accumulated from previous years. Some of the advantages claimed for the cumulative sick-leave plan are: It offers protection against the hardships of the occasional extended illness; it encourages regularity of attendance; and it tends to reward length of service, and it is of greatest value to the experienced and more professionally-minded teachers.

NEWS OF SCHOOL OFFICIALS

—MR. W. J. WHIPPLE, president of the school board of Superior, Wis., has refused reelection this year. Mr. Whipple has completed eighteen years of service on the board.

—The board of education of Mobridge, Mo., reelected H. S. FREEMAN as superintendent. He came from McLoughlin to Mobridge two years ago.

—C. A. BEAVER was reelected for a two-year term as superintendent of schools at Yankton, S. Dak.

—The Haverford township school district, Pennsylvania, reelected THOMAS A. BOCK as school superintendent.

—GEORGE L. KOONSMAN, for the past six years superintendent of schools of the Primers and Valdez school district, Colo., has been elected superintendent at Brighton, Colo.

—MR. R. C. WILLIAMS has been appointed director of research for the schools of the state of Iowa.

—MR. ROSCOE SHORE has been appointed assistant superintendent of schools at Kansas City, Mo., to succeed the late J. H. Marley.

—SUPT. E. H. HEDRICK, of Medford, Oreg., has been reelected for a term of three years, at a salary of \$5,000, \$5,200, and \$5,500 respectively.

—SUPT. E. R. BRISTOL, of Milford, Mich., has been reelected for the next school year.

—MR. J. R. MORRISON, formerly principal of the high school at Constantine, Mich., has been elected superintendent of schools, to succeed C. W. Bower.

—MR. H. N. DICKIE has been elected superintendent of schools at Harbor Springs, Mich., to succeed R. W. Fullerton. Mr. Dickie was for four years principal of the high school.

—MR. T. J. CONNELLY has been elected superintendent of schools at Ridgely, Tenn., to succeed J. L. West, who has resigned.

—MR. H. E. ODGERS, of Parkersburg, W. Va., has been elected superintendent of schools at Fairmont. Mr. Odgers had been head of the Parkersburg schools since 1918.

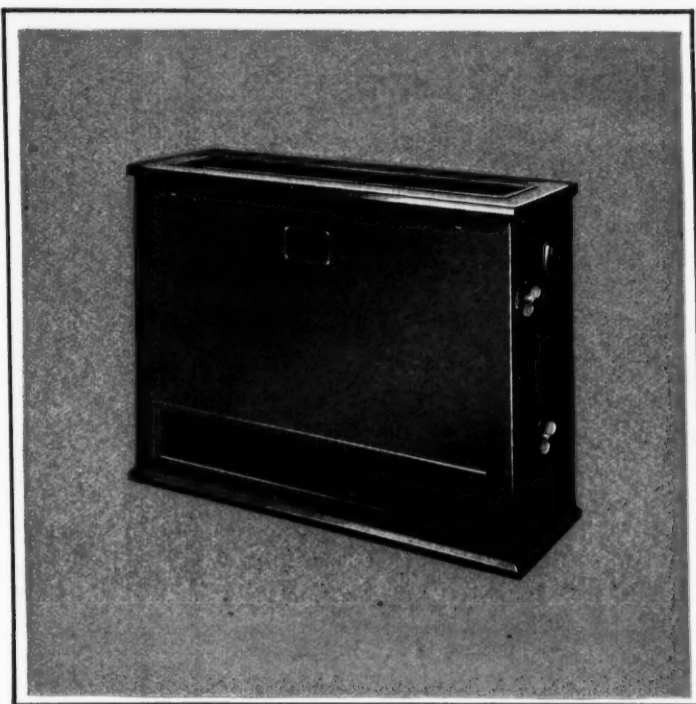
—SUPT. M. C. BEVAN, of Magill, Okla., was reelected with a substantial increase in salary.

—James W. Cottrell has been elected president of the Atlantic County, N. J., school-board association. Mr. Cottrell is a member of the Atlantic City board of education.

—Dr. C. A. Ray was elected president of the Meriden, Miss., school board. J. B. Melton is the new member. The other members are Mrs. J. G. Minniece, B. J. Carter, and J. M. McCorkle.

—SUPT. E. H. BLACK, of Bristow, Okla., who is completing his fourth term as superintendent of schools, has been reelected for a new three-year term.

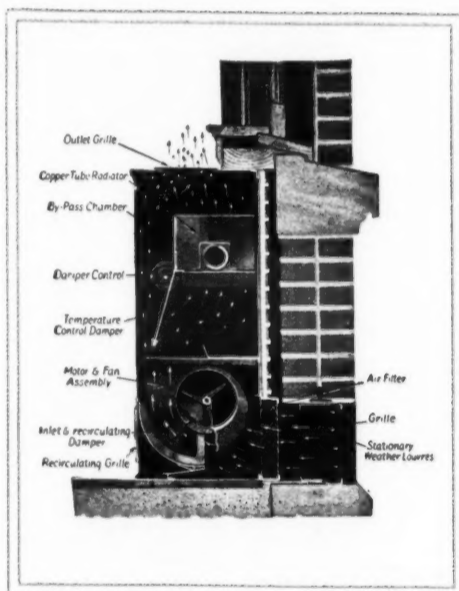
Universal Heating and Ventilating Units . . . quiet in operation . . . dependable . . . reliable . . . pleasing in appearance



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AND YOU'LL CHOOSE BUT ONCE



It's costly to choose wrong. It's costly to discover later that there is a better way to heat and ventilate your school building. In every sense of

the word, the service you get from your heating and ventilating units, in the years to come, depends upon your choice *today*.

Hundreds of the nation's leading schools are equipped with Universal Heating and Ventilating Units. Hundreds of installations have been made in the smaller schools, too, with complete satisfaction.

Universal Units are scientifically designed and built. They are quiet . . . sturdy . . . economical . . . dependable . . . serviceable.

Their vertical discharge of air at high velocity assures clean, wholesome air conditions *without drafts*. Air is delivered at a temperature higher than room temperature or lower, whichever way it is needed.

Specify Universal Units and you choose but once.

Phone or write any American Blower Branch Office—no obligation. There is one in every principal city.

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"Sirocco" VENTILATING; HEATING, AIR CONDITIONING, DRYING, MECHANICAL DRAFT
MANUFACTURERS OF ALL TYPES OF AIR HANDLING EQUIPMENT SINCE 1881

Light Without Glare Ventilation Without Draft

Athey Shades are the modern shades for Schools and Colleges. They may be lowered from the top or raised from the bottom, allowing a full measure of soft light (without glare) to reach the back of the room. Besides being glare-proof and draft-proof, they are the most attractive and lasting shades known for modern schools, colleges, offices, etc.

Athey shades have no wooden slats, no rollers, springs, catches or latches. They do not have to be jerked for adjustment.

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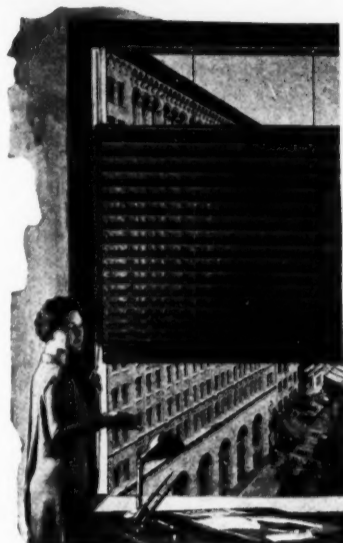
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Window Shades
and Metal Cloth Lined
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Send for catalog and list
of school installations now.

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In Canada—Cresswell-Pomeroy, Reg'd,
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The teacher or students never touch the shade with the hands. Shade operates noiselessly and smoothly.

Enough heat for Zero weather is far too much for 30°

When the Dunham Differential Heating System cuts down the steam temperatures so as to maintain uniform comfort without overheating it also cuts 25 to 40 per cent off the fuel bill.

Write for Dunham bulletins
with full information on the proved
method of heating

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Over 80 branch offices in the United States and Canada bring Dunham Service as close to you as your telephone. Consult your local directory. Dunham engineers are at your service with complete and authoritative data on improved heating to meet your individual requirements.

Many existing heating systems can be converted to Differential operation at moderate cost. These change-overs will pay for themselves. Dunham engineers will survey present systems without obligation.

Look for the name
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This nameplate identifies
a genuine Dunham Ther-
mostatic Radiator Trap.



The Dunham Differential Vacuum Heating System and individual parts of the apparatus used in that system are fully protected by United States Patents Nos. 1,644,114; 1,706,401 and 1,727,965 and Canadian Patents Nos. 282,193, 282,194 and 282,195. Additional patents in the United States, Canada and foreign countries are now pending.

CHATS DURING RECESS

In speaking of eighth-grade examinations before a body of Midland county, Mich., teachers, Prof. M. L. Smith of the Mt. Pleasant Teachers College, said: "The educational sausage machine is now stuffing the children for the spring exams. They are spending a large portion of the year in these rural schools learning things they'll never use. And the teacher has to teach them those things, because she isn't any good unless her pupils pass the exams. Those exams just come to them—God knows from where—and they have to pass them."

—It is the custom in many school districts of New Jersey, for the successful candidate in a school election to publicly tender his thanks to the constituency. The following is an extract from one of these acknowledgements: "Through this confidence, shown by reëlection after reëlection, I have been given the opportunity to contribute in a small measure to the growth and standing of our schools, which are unquestionably among the best in the state. This demonstration of friendship will be cherished always. The vote shows that friendship is God's choicest gift."

—The board of education of Marietta, Ohio, urges vaccination of pupils. Compulsory vaccination will not be ordered.

—The board of education of Manitowoc, Wis., has opened its sessions to the public and the newspaper reporters. The *Manitowoc Times*, in commenting on the action says: "A man cannot keep the favor or confidence of the public behind closed doors. The board of education, in giving reporters free access to all privileged matter in its hands, opens the way to a fuller understanding of its aims and plans. It is certain that the newspapers will respond to the new policy of the board with fairness. They will not 'hash' over matters, but will be given the opportunity to present real facts, as voiced by board members and as written in the records. The minor differences and controversies that must in all fairness to board members be threshed out in private will hold no lure for the newspapers. Final action is what the people want. Open sessions will give the board members the opportunity of stating

their cases. It will mean, then, that the board holds almost direct communion with the public, and upon the judicious use of its powers and the wisdom of its policies will depend the favor and respect it receives."

—The editor of the *Commercial-Appeal* of Memphis, Tenn., says:

"A new responsibility of the board of education is to see that every pupil washes behind the ears. As soon as the child reaches the age of 6 the authorities see to it that he enters school. It is the business of the government to keep him in school and keep him amused, and so far as possible administer instruction. There are limits to which the authorities may go even in the interest of health and sanitation. Forcible intrusion upon the youthful neck with a wet rag should be one of the forbidden prerogatives of government. Even the grimmest neck has rights that must be respected. We take it that

SUPERINTENDENCY APPRENTICESHIP

It is becoming more and more evident that school superintendents are both born and made. There was a time when we erroneously believed that, given the right birth, that is, the right original nature, the "making" could be done in the school of education: now we have become convinced that what we can do for prospective superintendents while they are in residence is only part—probably the smaller part—of what they need in preparation for administrative work. Indeed, we have concluded that the chief place for making superintendents is not the college, but the superintendency itself, and that the chief "makers" are not professors, but superintendents.

—Prof. C. W. Stone, State
College of Washington

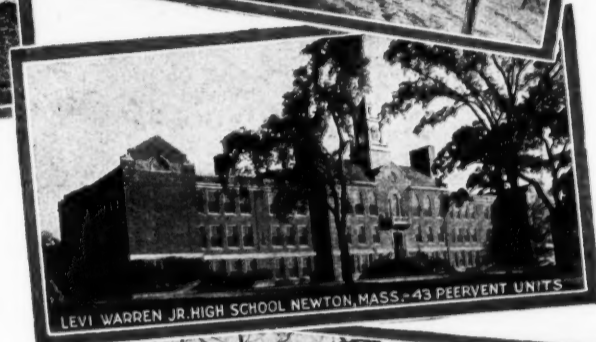
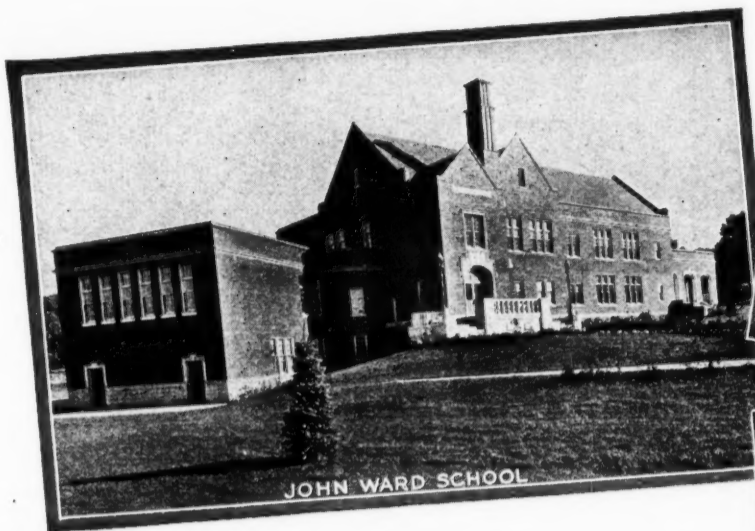
there are necks that have never been washed, and that under the law giving every person the right of self-defense, never will be until inspired by budding romance."

—A Cleveland, Ohio, school segregated the pupils by sexes, with the result that both the boys and the girls received better marks than formerly "in spite of the fact that the boys have become rowdies, fighting most of the time, while the girls occasionally lambast each other with rulers and saucer their teachers." The Dayton, Ohio, *News* in comment says: "This paradoxical result puzzles not only the teachers, but also a contemporary who asks: 'How are you going to figure that one out?' Well, here is one answer. The sexes, even as children, play-act to impress one another with their attractive qualities. Separate them—remove the audience—and the show stops. The actors become their real selves. The distracting presence of the opposite sex eliminated, there is naturally more attention to study."

—"If we exclude religious influence in our public schools, we are breeding a race of pagans, future criminals, and inmates of the state penitentiaries," according to Rev. George F. Hunt, pastor of one of the local churches at Madison, Wis., who spoke recently before the mothers' club of the Hawthorne School.

"You are sharpening the wits and whetting the intellectual faculties of the child, making him more dangerous than he would be without education," said Rev. Mr. Hunt in commenting on the lack of religious instruction in the schools. "Religious instruction," he said, "should begin in the home." He pointed out that the Jewish people produce the highest type of home life by the unity of their faith and the high standard of family life.

—"Forty years ago, country children walked through the snow to the little one-room schoolhouse. The death rate from diphtheria was pretty high," writes John W. Love. "Since that time diphtheria has gone way down, thanks to immunization, but traffic fatalities among children have just about taken the place of diphtheria as a cause of death."



10 public schools in this city are equipped with PEERVENT Systems

IN THE city of Newton, Massachusetts, ten of the public school buildings are equipped with PeerVent Heating and Ventilating Units. Of these, the John Ward School, the Levi Warren Junior High School, the Hamilton School, the Underwood School, the Warren School and the Cabot School are new buildings and the PeerVent Units were installed when the schools were built.

The old buildings in which PeerVent Units have been installed are the Adams School, the Oak Hill School, and the Classical High School. The gymnasium of the new High School is equipped with four super-size PeerVents.

The new fire station and the old city hall of the City of Newton also have PeerVent installations.

Repeat orders such as these indicate that these modern PeerVent Units are giving the same efficient service and flawless operation which have characterized PeerVent Units for the past twenty years.

PeerVent Units offer independent service for each room, thorough ventilation without drafts, flexibility of heating and ventilating control, and *absolutely quiet* operation.

PEERLESS UNIT VENTILATION CO., INC. *Pioneers in Unit Ventilation* BRIDGEPORT, CONNECTICUT
SALES OFFICES IN PRINCIPAL CITIES FROM COAST TO COAST

PEERVENT

Heating and Ventilating Units

Safest For Schools Potter Tubular Slide Fire Escapes



The Potter
Tubular
is the only
fire escape

with a service record
that is approved by
the Underwriters'
Laboratories.

FIRE DRILLS, when using a central hallway and staircase, are always a danger, as the world's greatest school catastrophes have proved. A scream or a cry of FIRE can easily create a dreaded panic even during Fire Drill.

POTTER TUBULAR SLIDES coast the pupils away from the center of the building to the outside air without the least danger from smoke, gases, fire, or panic.

Write for Details and Specifications.

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1858 Conway Bldg. — CHICAGO



**PLEASANT EFFECTIVE
ACTUALLY PURIFY THE AIR**

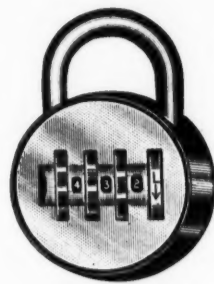
SEND for samples and prices of Eagle Air Sweetening Blocs, Crystals and Blockettes. They are *unusually efficient and long lived* because made by a special pressure moulding process. They are clean, easy to handle and *leave no oily residue*. Evaporate completely.

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DEODORIZING PRODUCTS



1/2 ACTUAL SIZE
PAT. PENDING

APPROVED and accepted by leading architects, schools and institutions in all parts of the country — Samples and literature furnished upon request. Made in assorted sizes and designs.

**STURDY
SIMPLE
SECURE**

Opens in dark by touch as readily as in the light by sight with same combination.

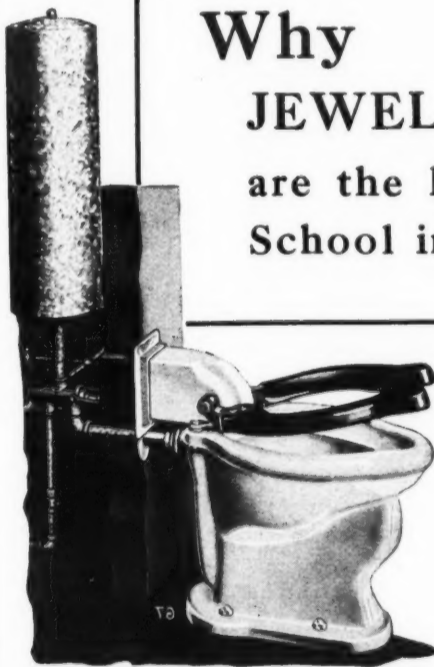
Master Charts Furnished

GREENE TWEED CORP.

9 Liberty Street

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**Why
JEWEL Closets
are the logical
School installations**



1. Accepted as the most practical installation for school purposes because of its automatic operation.
2. Records of years of constant service without break-downs not unusual.
3. Positive flush by air and water under pressure, with valve mechanism operated by single, sturdy rod connected to seat itself.
4. Guaranteed for five years of never-failing performance.

*They May
Forget—
but a
JEWEL
doesn't*

School authorities and school architects know that children may forget, but a JEWEL doesn't. The heart of JEWEL superiority lies in the famous JEWEL Flush Valve — no interior springs to rust or corrode, no faulty needle valves to require constant adjustment or attention! And economical, too!

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**JEWEL AUTO PNEUMATIC
WATER CLOSETS**

MAINTENANCE COSTS GO DOWN

When the CLARKE Vacuum Portable Sander GOES TO WORK



Ideal for teaching practical woodworking in the manual training department.

A Boy Can Run It

Weighing but 22 pounds (31 lbs. with floor handle), the Clarke can be carried about with one hand. No great exertion is required to use it. The power and speed of the machine replace effort by the operator. It works in the same manner and almost as easy as a vacuum cleaner.

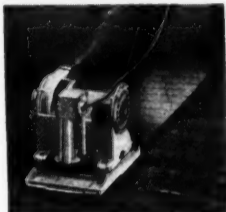
No special wiring is required. Plug into any electric light socket and go to work. No dust or muss—the powerful, in-built vacuum gets it all. Sturdy, dependable—backed by 13 years of experience and improvement in building portable sanding machines. A definite, written, positive guarantee of performance goes with every Clarke.

CLASS-ROOM desks, teachers' desks, tables, laboratory benches, drawing boards, floors, corridors can always be spic and span, new looking. Scratches and scars can be forever banished from school furniture.

And at an amazingly low cost! Simply equip your school with a Clarke Vacuum Portable Sander.

The engineer or janitor can operate it. The skill for fine work is built into the Clarke. This powerful, fast-cutting machine will surprise you by the quality and quantity of work it will do.

Refinish a whole room full of old scarred desk tops in one day, at the rate of one each four minutes or less. No need to remove the desks. No muss, either. A powerful vacuum gets all the dust. Varnish immediately after sanding. On floors, the Clarke is guaranteed to refinish to velvety newness, from 300 to 1,000



Restores 300 to 1,000 sq. ft. of old varnished floor to velvety smoothness in 8 hours.

square feet of old, varnished floor in 8 hours. No varnish remover needed, either. On average school floor work, the Clarke

will do up to 3,000 square feet in 8 hours.

Schools all over America are reducing maintenance costs, improving quality and amount of maintenance work done, by using the Clarke Vacuum Portable Sander. Get the complete facts about the machine. You will readily see its advantages to your school. Send the coupon today.

In Demand for Manual Training

Teaching wood-craft with the Clarke is gaining in popularity. Boys like to work with the same powerful, sturdy machine that is used in the foremost wood-working shops of the country. Instructors appreciate the thoroughness with which they can teach the trade. And economy results from the two-fold use of the Clarke—Manual Training at class time, Maintenance work at other times.

CLARKE SANDING MACHINE CO.

Dept. G-44, 3821 Cortland St., Chicago, Ill.

Originators and, for 13 years, Manufacturers of Portable Sanding Machines.



Re-surfaces a scratched desk in 4 minutes or less, without dust or muss.

Ask the Teachers

Ask the teachers about the value of smooth, shiny desk tops; bright, even floors; the appearance of newness in benches, tables. Neatness and care are developed in pupils and an inspiration to do better work results. Or ask the health official for his opinion of the value of smooth floors, shiny desks, in place of rough, scarred furniture and floors. Ask the janitor about the ease of keeping clean the rooms with velvety floors, about the time saved in sweeping and the more thorough job possible. The Clarke Vacuum Portable Sander gives you these benefits.

GET THE FACTS TODAY

— SEND THIS COUPON —

Clarke Sanding Machine Co.,
Dept. G-44, 3821 Cortland St., Chicago, Ill.

Gentlemen: Without obligation to me, please send the complete facts about the Clarke Vacuum Portable Sander for schools. I am interested in the economies you promise.

Name.....

Address.....

City..... State.....

☐ Maintenance Work ☐ Manual Training

WHEN BOARD MEMBERS BECOME EXECUTIVES

(Concluded from Page 46)

having, they order one of their members to purchase it through the local store. The principal attends board meetings only when he wants to ask for something for himself!

Extreme cases? Perhaps, yet common enough in my experience. Why suffer them? To change these ingrained notions takes time and infinite patience. The iconoclast cannot readily effect reforms in educational administration. It seems well to hold in mind a concept of the ideal and then push slowly but unremittently toward that as a goal, forcing a needed change here, fostering an approximation there.

Providence help us to get more broad-minded, busy, and efficient men and women on our school boards—men and women who consider their biggest job the selection of a superintendent, a trained executive, to run their schools, and having elected him, will let him do the administering within limits they describe. And in the same breath let us ask for more clear-thinking, well-trained, and upstanding men, who, given a superintendency, will shoulder responsibilities and execute their duties in a manner that will win the confidence and respect of their employers and will redound to the credit of a profession that is just now beginning to challenge the promiscuous use of its techniques and prerogatives.

TOMMY DOES TO OTHERS

(Concluded from Page 38)

Tommy shook hands with a lightened heart. "You see it's like this," he explained to Ettore, earnestly, on the way home, "I would 'a done the right thing only I told a lie, and that made it wrong, instead. See? Like when you win in a game, but if you cheated to win you didn't win at all!"

Ettore looked slightly flustered, and then he shrugged.

"Sure," he said.

PROFESSIONAL STANDARDS FOR TEACHERS

A practical outline of professional standards has just been issued by the Michigan Education Association. The material, which has been issued in the form of a bulletin, was prepared and presented by Dr. J. B. Edmonson, of the School of Education, University of Michigan, and Dr. Dwight B. Waldo, president of the Western State Teachers' College. The outline, which is intended to serve as a guide in the promotion of better service among teachers, lists the high points under ten principal headings as follows:

1. What is a profession?
2. What evidence is there that the public wants teaching to become more highly professional?
3. How may teaching be made a profession?
4. How would children benefit through the professionalization of teaching?
5. How would the public benefit through the professionalization of teaching?
6. How will teachers benefit through the professionalization of teaching?
7. What evidence is there that teaching is becoming a profession?
8. How do some teachers retard the development of teaching as a profession?
9. What are some of the immediate contributions that a teacher can make toward making teaching a recognized profession?
10. Upon whom does the heaviest responsibility rest for developing teaching as a profession?

TEACHER TENURE IN CALIFORNIA

"The tenure law was originally designed to insure the teacher of ability and character a permanent position," says the *Sierra Educational News*, the official publication of the California Teachers' Association. The article continues: "Unfortunately, it has not accomplished its purpose in the rural districts of the state. Governing boards of school districts resent having to retain teachers who may not be removed, except after a public hearing usually attended with turmoil within the

district. It is true also that a teacher once having acquired the status of permanency is apt to grow lax, resting secure in the knowledge that the employing governing board cannot remove him.

"The result has been that, in the main, the rural districts of the state have refused to reemploy teachers for the fourth consecutive year or, in some cases, even for the third year, regardless of the worth of the teachers.

"The resentment toward the tenure law is growing steadily. The larger city districts do not appear to have been affected by the spreading dissatisfaction, because they have the pick of the teachers.

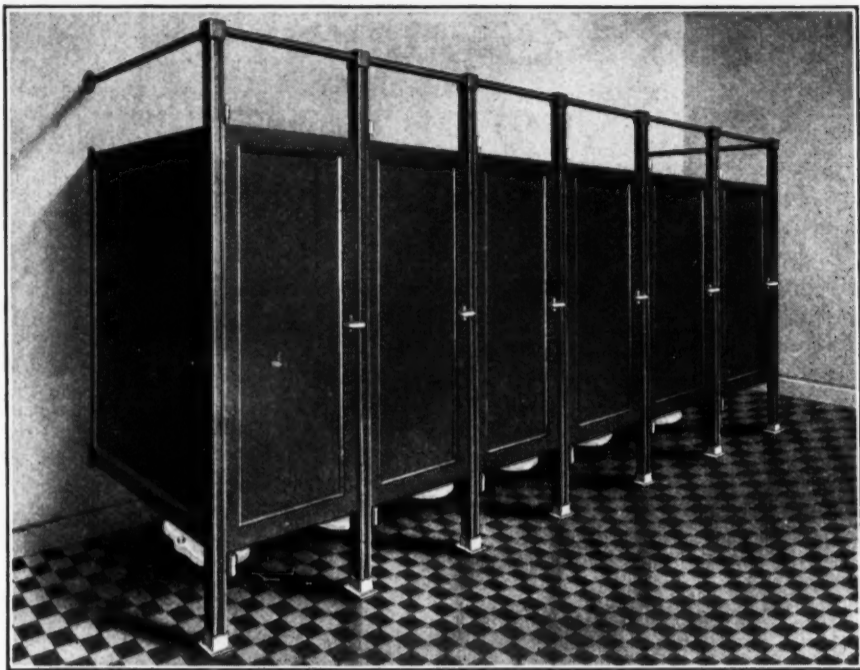
"The practical effect of the tenure law has been to tear down, not build up, the teaching profession. It has resulted in an unhealthy condition in the public-school system of California, which demands correction."

HOW ALTUS CARRIED A BOND ISSUE

A \$200,000 school-bond issue was successfully carried at Altus, Okla., by a vote of 1,299 to 327. It proved the climax of a systematic advertising campaign started three years ago.

The methods used were the daily paper, talks before civic clubs, photographs of buildings, printed window cards, posters by the children, discussions in parent-teacher clubs, and a parade on election day by the whole school.

The problem was not only to get buildings, but to get a raise in valuation, whereby the number of teachers needed and overhead could be taken care of after the buildings are built. The local chamber of commerce two years ago placed the school problem as their chief work for the year. There was no way to pay people to equalize the valuations of the town. A banquet was held and all the principal men were invited. Four thousand dollars was raised and a set of men from Dallas, Tex., were employed who worked about five weeks and revalued every piece of property in the district. Then they kept the man on the job for some weeks to meet objections, etc. It was heard all along that this kind of thing would not stand up. It did stand up and gave Altus \$30,000 more to run the schools this year.



Panel and post assembled at the factory ▲▲ Adjustable wall brackets for easy erection ▲▲ Wall clearance for ventilation ▲▲ All assembled and encased full floating Gravity Roller Hinges ▲▲ New Sanylene Super-finish.

Sanymetal steel compartments are made in several designs for toilet, shower, and dressing enclosures. Write for descriptive literature.

THE SANYMETAL PRODUCTS COMPANY
1703 Urbana Rd. Cleveland, Ohio

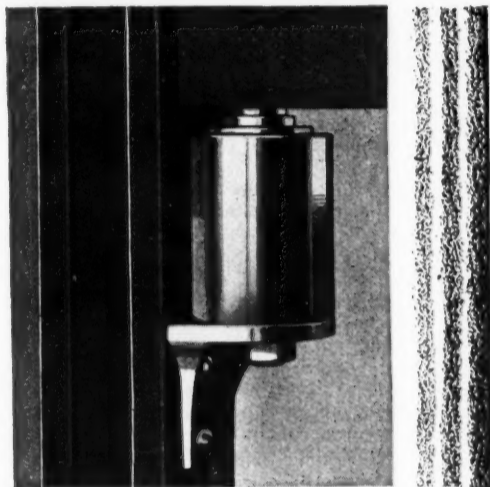
Sanymetal

TOILET AND SHOWER PARTITIONS

UNIT-PANEL

A new Steel Toilet Partition by Sanymetal

Equipped with improved Gravity Roller Hinges



PRINCIPLES OF ADVANCING TEACHERS' SALARIES

(Concluded from Page 50)

schedules demand more careful and complete supervision than most school systems are equipped to give. Partiality and jealousies may creep in. Outside and inside pressure from the more aggressive may be difficult to withstand. Some contend that the challenge of the opportunity to do a useful and creditable work is a more potent stimulus to the right kind of service than is an increment added to the salary. Admitting the value of the theory many doubt its practicability.

It is, of course, understood that teachers who do not meet a minimum standard of efficiency are eliminated. It is possibly true that some of the towns which have no such provision in their salary schedule, may by vote of the board make a special case of the salary of a teacher who is rendering unusually meritorious service. Yet few towns mention any provision for a merit consideration in the salary schedule.

Some towns report that for exceptional service, 10 per cent of the entire teaching staff may by vote of the school board on recommendation of the principal and the superintendent, receive a merit bonus of \$50. Others reserve the right to increase or withhold the annual increment in case the work of the teacher is of superior merit or unsatisfactory as the case may be. Still others reserve the right to pay salaries in excess of schedule where circumstances and merit warrant. And yet others establish a supermaximum for "unusual ability, meritorious service, or the receipt of credit for further study."

A Case in Point

One practice is to rate teachers who secure a success rating of A or B are advanced \$100 toward the maximum, those who secure a rating

of C, \$50, and those who are rated less than C are not retained.

The main principles for recognition of merit seem to be (1) that such recognition be by a bonus, by increasing, reducing, or withholding the increment or by adding supermaximum for merit; (2) that such bonuses, additions, reductions of withholdings of the increment or promotion to supermaximum, on account of merit be by recommendation of the principal of the school and the superintendent of schools to the board of education.

In dealing with the recognition of merit as a factor in the salary schedule it is interesting to note the report of the committee which recently recommended a salary schedule for Pittsburgh. By it the elementary teacher has 10 increments on account of experience, to \$2,200; then 15 per cent have a maximum \$200 higher, \$2,400, on account of training and merit; 12 per cent \$2,600 for the same reason; 9 per cent \$2,800; finally, 6 per cent \$3,000, and 3 per cent \$3,200. To reach the \$3,200 level the teacher must have 4 years of training and be a superior teacher. It should be noted that this committee also recommends an agency under the direction of an associate superintendent "to develop an organization and the necessary technique for the purpose of determining where and by whom superior services are being rendered." Adequate supervision with definite standards is an essential for recognition of merit.

¹Teachers' Salaries in Pittsburgh, *The Journal of the N.E.A.*, February, 1929, p. 64.

WHAT SUPERINTENDENTS ASK APPLYING TEACHERS

(Concluded from Page 51)

82. Approximate Age	1
83. Height	1
84. Weight	1
85. Race	1

86. Married	1
87. Number of Dependents	1
88. Names of Dependents	1

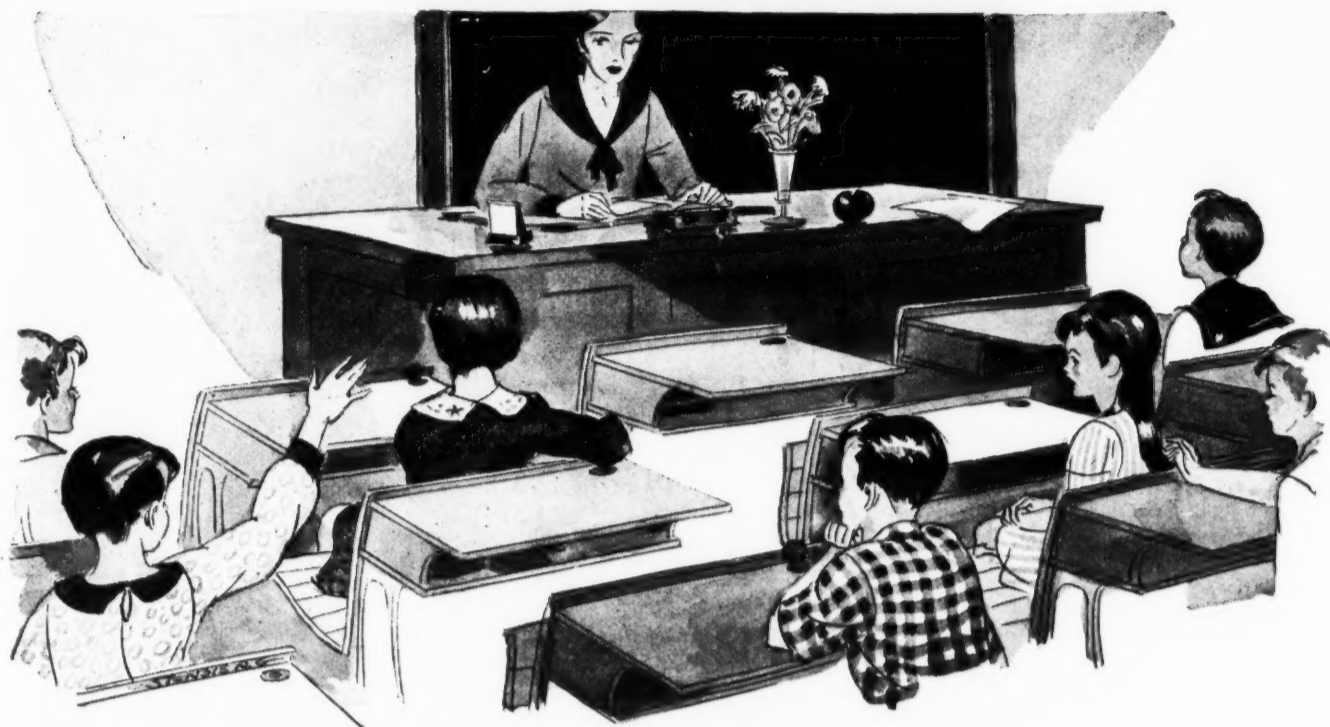
Of the 88 different items of information called for in the reference blanks of 26 cities, there were only eight items which were included in more than 15 of the cases studied. This would indicate that there is little agreement among superintendents as to what information is relevant.

The forms used by the following cities, however, most closely conform to what is most used in the cases studied: Los Angeles, Calif.; San Diego, Calif.; Tampa, Fla.; Cicero, Ill.; Davenport, Iowa; St. Paul, Minn.; Cincinnati, Ohio.

The reference blanks should be brief and in a form which will take little time to fill out accurately. All irrelevant material should, as far as possible, be eliminated. Only those factors which cannot otherwise be determined should be included in the reference form. It is requesting too much to expect an administrator to fill out replies to a lengthy list of questions which could be better answered by the applicant himself or could be classed as measureable factors.

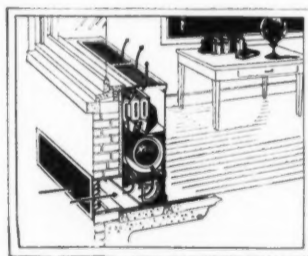
The reference form used by Cincinnati is especially recommended. It is brief, clear, and well arranged both for the person to whom it is sent and for purposes of analysis by the prospective employer.

—A recent statement of the state education department of Ohio shows that there are 3,266 men teachers in the elementary schools and 23,738 women teachers, a total of 27,004 in all. In both junior and senior high schools, there are 4,584 men teaching and nearly twice that many women, or 8,320, a total of 12,904 teachers in junior and senior high schools. In all, there are 33,753 women and 8,948 men, or a total of 42,701 teachers in the state. Approximately 79 per cent of the teachers of the state are women, and 21 per cent are men.



At Roll Call

— — — how many seats are empty?



DRIFTY schoolrooms . . . warm one minute and cool the next . . . are fertile breeding places for colds.

Modern schoolrooms are being made SAFE . . . both as to temperature and freedom from draft . . . by Sturtevant Unit Heater-Ventilators. These units draw in outdoor air . . . filter it clean of dust and impurities . . . temper it just to the right degree . . . then pass it gently into the room. Operation is QUIET. Control is simple . . . automatic or manual, as you wish.

Investigate the advantages enjoyed by schools equipped with Sturtevant Unit Heater-Ventilators. Many installations are shown in Catalog 361 . . . a book that should be familiar to school officials, architects and engineers. A copy? For the asking . . . from our nearest office.

B. F. STURTEVANT COMPANY

Plants and Offices at: Berkeley, Cal. Camden, N. J. Framingham, Mass.
Galt, Ontario Hyde Park, Mass. Sturtevant, Wis.

Branch Offices at: Atlanta; Boston; Buffalo; Camden; Charlotte; Chicago; Cincinnati; Cleveland; Dallas; Denver; Detroit; Hartford; Indianapolis; Kansas City; Los Angeles; Milwaukee; Minneapolis; Newark; New York; Omaha; Pittsburgh; Portland; Rochester; St. Louis; San Francisco; Seattle; Washington, D. C. Canadian Offices at: Toronto; Montreal and Galt.

Canadian Representative: Kipp Kelly, Ltd., Winnipeg.
Also Agents in Principal Foreign Countries

Sturtevant *the Silent* Unit Heater-Ventilator
Reg. U. S. Pat. Off.
SUPPLIES OUTDOOR AIR ~ FILTERED CLEAN ~ AND TEMPERED



Automatic Stream Control

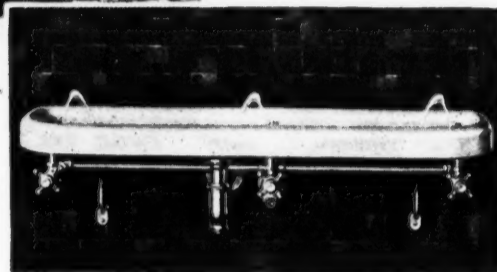
No lips need touch two-stream projector, which gives ideal hygienic and practical drinking mound with automatic stream control to guarantee uniform height of drinking stream regardless of pressure variation.



The John Hay High School, Cleveland, O.
Geo. M. Hopkinson,
Arch't.

*You needn't worry about
servicing problems...*

Once a Halsey Taylor fountain is installed, there is a pleasant freedom from annoyance and frequent servicing. Stream is always at practical drinking height, water always in the bowl—not on the floor—regardless of pressure! A type for any need—write! The Halsey W. Taylor Co., Warren, O.



No. 703 (Battery Wall Type)

Cast-iron trough with apron vitreous enameled, on painted iron brackets; brass supply fittings; self-closing supply valves, loose key compression stop; three projectors!

HALSEY TAYLOR Drinking Fountains

PROMOTION, TENURE, AND DISMISSAL OF JANITOR-ENGINEERS

(Concluded from Page 54)

Only for proved, sufficient cause.....	6
By the board of education for disorderly conduct, incompetency, or violation of the rules of the board	4
At any time without notice.....	16
By the superintendent with two weeks' notice.....	4
On five days' notice.....	1
By superintendent of buildings and grounds.....	4
Suspended by the superintendent or principal.....	10
Suspended by the supervisor of janitors.....	1

In the Massachusetts cities included in the Massachusetts report, janitors may be dismissed:

By the civil service commission.....	2
By selectmen	3
By school committee or one of its committees... ..	16
By the superintendent of schools.....	256
By the principal	1
By the head janitor.....	2

The following are some of the practices concerning dismissal of janitorial-engineering employees, as stated by superintendents of various cities:

"The board of education reserves the right always to fire a janitor on five days' notice.

"The general understanding is that if they (janitors) wish to give up their work or if the superintendent wishes to discontinue their services, two weeks' notice shall be given."

"A man is hired and stays on the job just as long as his work is satisfactory. When he neglects his duty, he is promptly dismissed. Experience has taught us that this method of handling the situation eliminates 'red tape' and politics and gives us the most efficient service."

"We do not have written contracts with janitors, but they are elected or appointed with the understanding that they may remain as long as their services are satisfactory to the board of education and to the principals of the schools, but whenever not satisfactory they may be dismissed without notice."

"He (the janitor) is subject to dismissal at

any time. As a matter of fact, however, one is seldom dismissed."

The good of the schools should be the first consideration in dismissing a janitor-engineer, but certain rights of janitor-engineers should be respected. They should not, except in case of gross immorality, be dismissed without notice. In any case involving dismissal, the board of education should give the employee a hearing and the right to be represented by counsel. There should be little opportunity for appeal above the board of education to civil service commissions or courts of law.

Summary

1. School systems should have a system of promotion for janitor-engineers. Untrained men should not be selected in preference to qualified assistants for the higher positions. Recommendation for promotion should come from the superintendent of buildings and grounds.

2. Periods of employment should be for 12 months. Contracts are unnecessary. Tenure should be indefinite, to be terminated at any time, with proper notice, by either party.

3. Action for dismissal of janitor-engineers should originate with the superintendent of buildings and grounds, or by recommendation of the building principal to this official. Such recommendation should go by way of the superintendent of schools to the board of education for final action.

TENNESSEE SCHOOL OFFICERS HOLD MEETING

The Tennessee Public School Officers' Association held its annual meeting January 14-16, at Nashville.

One of the important subjects of the meeting was the unit of administration, during which Mr. J. E. Walker, superintendent of the Hamilton county schools, advocated combining all schools within the county into one system or unit.

The final session of the meeting was held at the Austin Peay Normal School, Clarksville. This school, organized as a memorial to the late governor Austin Peay, devotes its entire energies to

the training of teachers for the elementary and rural schools of the state. The faculty is headed by Prof. J. S. Ziegler, formerly superintendent of schools at Chattanooga.

The officers elected for the ensuing year were: President, Mr. H. P. Shephard, Knoxville; vice-president, Mr. W. C. Dodson, Davidson county schools, Nashville; secretary, Mr. P. L. Harned, Nashville; treasurer, Mr. C. J. Bell, Nashville.

INSTRUCTIONAL COSTS IN NEW JERSEY SCHOOLS

Every element of instruction has increased in cost between 1924 and 1929 in the New Jersey schools, according to a statement issued by the department of public instruction. The rise has been far greater than the increase in pupils in average daily attendance.

The cost of supervision increased from \$3,807,908 in 1924-25, to \$5,322,147 in 1928-29, which was an increase of \$1,514,238, or 39.8 per cent. The cost of supervision per pupil in average daily attendance increased from \$6.64 in 1924-25, to \$8.36 in 1928-29, or 25.9 per cent. The cost of teachers' salaries increased from \$36,547,822, in 1924-25, to \$47,235,423 in 1928-29, which was an increase of \$10,687,601, or 29.2 per cent. The cost of teachers' salaries per pupil in average daily attendance increased from \$63.67 in 1924-25, to \$74.20 in 1928-29, or 16.5 per cent. Textbook expenditures increased from \$1,196,696 in 1924-25, to \$1,332,014 in 1928-29, which was an increase of \$135,318, or 11.3 per cent. Expenditures for supplies increased from \$1,587,651 in 1924-25, to \$2,013,917 in 1928-29, which was an increase of \$426,265, or 26.8 per cent. Based on average daily attendance, the cost of supplies increased from \$2.77 in 1924-25, to \$3.16 in 1928-29, which was an increase of \$0.39 per pupil, or 14.1 per cent.

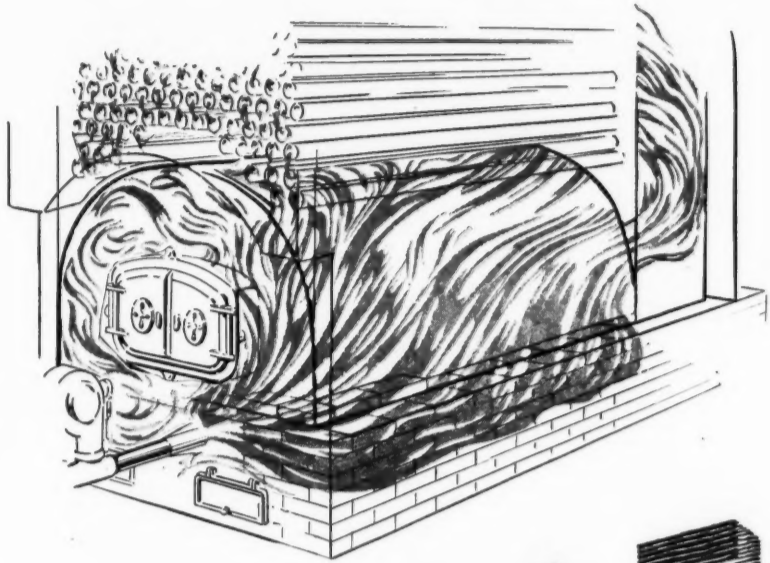
The total instructional costs increased from \$43,208,631 in 1924-25, to \$56,066,755 in 1928-29, which was an increase of \$12,858,123, or 29.8 per cent. The cost of total instruction per pupil in average daily attendance increased from \$75.28 in 1924-25, to \$88.07 in 1928-29, or 17.0 per cent.

The total number of pupils, it was shown, had increased from 573,986 in 1924-25, to 636,644 in 1928-29, which was an increase of 62,658 pupils, or 10.9 per cent.

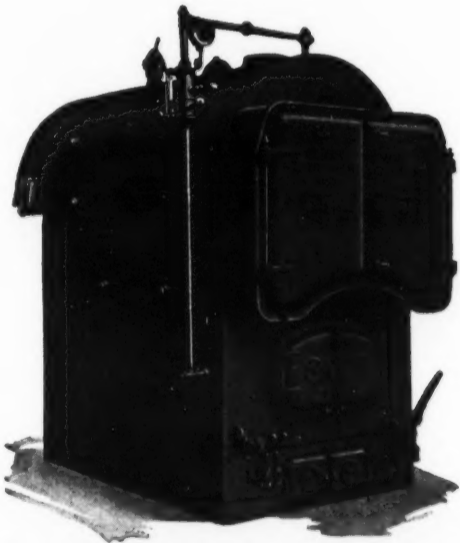
"The Boiler for your School Building is the one you'd choose for Ultimate Economy"

The Size of the Firebox

can make or break a boiler's combustion efficiency. If you want to save fuel—with a boiler that has a high steaming rate—take a minute and scale off firebox dimensions.



TITUSVILLE "SR" Welded Boilers



For a compact boiler, you'll want Titusville Type "SR"

have big fireboxes because we've engineered enough difference in their design to enable them to generate steam FAST. And they have airports just as admirably proportioned. You get true combustion efficiency.

What more can any man want than an efficient boiler, honestly built? You'd willingly insist on a Titusville Boiler for your own building. Investigate it as thoroughly for equipping your new Schools in 1930.

There's a set of Titusville Boiler Bulletins worth having. Ask us to send one.

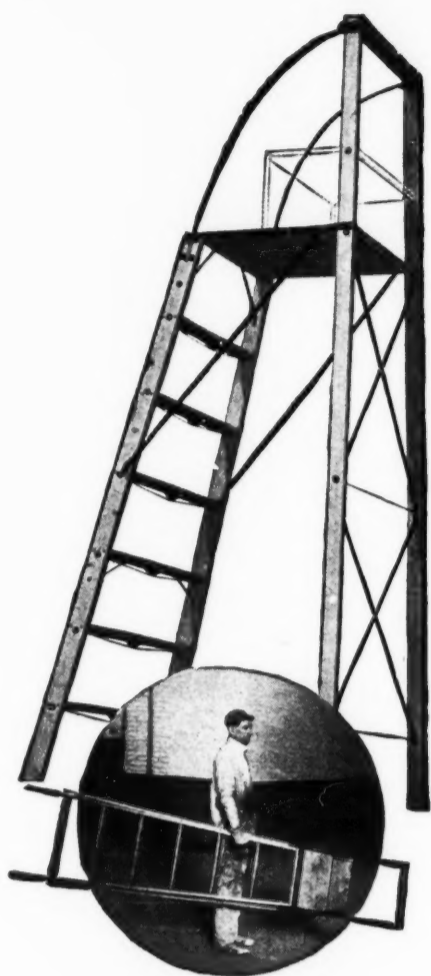
THE TITUSVILLE IRON WORKS COMPANY

Division of Struthers Wells-Titusville Corporation
TITUSVILLE, PA.

Branch Sales Offices in All Principal Cities



TIW-44



DAYTON Safety Ladder

(Patented)

You Can't Keep a Good Man Down!

But you can mighty soon transform a good workman into a poor one if he falls very often from a tipsy ladder. Safe workers are better workers. The Dayton Safety Ladder makes all ladder-work *riskless*. It increases effi-

ciency, cuts down operating expenses. Sizes 3 to 16 feet. Made of airplane spruce, light and strong. Straight-backed. Folds flat. Auxiliary step for added height. Moderately priced.

Type "B"
Dayton Ladder
Smaller, popular-
priced, all-purpose
safety ladder in
seven sizes.

Write Dept. ASBJ-4 for
complete information

THE DAYTON SAFETY LADDER COMPANY

121-123 West Third Street, CINCINNATI, OHIO

Stock carried by Pacific Coast representative,
Bullard-Davis, Inc., Los Angeles and San Francisco,
and by 160 other distributors from coast to coast.

ORGANIZING ADMINISTRATIVE PERSONNEL FOR BETTER INSTRUCTION

(Concluded from Page 55)

control, which functions admirably and which does not affect the supervisory officers in the ways previously described.

Supervisory Work in General

The superintendent of schools is the recognized professional head of the system. The relationship between the central office and intermediate administrative officers in the larger cities has an influence on the efficiency of supervisory work. An exact definition and delimitation, together with the professional status of building principal, subject directors, special teachers, and classroom teachers should be attempted for the purpose of avoiding overlapping and duplication. The weekly conference between the administrative staff and the supervisory staff is the basis of all constructive purposes in instruction. The periodical conference between the supervisory staff and the teaching staff, held during the working school day, is most effective. Extension courses in lieu of the antiquated institute have latent possibilities as instrumentalities for the indirect supervision of instruction. In brief, the organization of the supervisory staff is dependent upon many factors such as state policy, funds available, size of system, conception of education by the professional staff, nature of community, type of physical plant, professional status of teachers from the standpoint of training, tenure of teachers, teacher turnover, and program of work in mind. The varied nature of the interests and needs of children in various parts of the commonwealth indicate the need of local autonomy in the organization of the supervisory staff, unrestricted by stereotyped form, and unencumbered by lifeless precedent and predetermined generalities.

THE QUAKERTOWN HIGH SCHOOL

(Concluded from Page 60)

architect, of Harrisburg. The following are the details of construction and equipment:

Corridor and stair finish.....Glazed brick
sand-finish plaster
Classroom finish.....Plaster, with sand finish
Auditorium finish.....Plaster and plaster stone
Gymnasium finish.....Smooth yellow brick
Finish of toilet rooms.....Plaster

Mechanical Equipment

Type of heating.....Illinois vapor system
Temperature control.....Automatic

Cost and Pupil Capacity

Pupil capacity.....500
Number of pupil stations.....14
Cost of building.....\$160,000
Cost of equipment.....\$20,000
Total cost.....\$180,000
Cost per cubic foot.....23 cents
Cost per pupil.....\$320
Total cost per pupil.....\$360

LENGTH OF TERM IN NORTH CAROLINA SCHOOLS

The state education department of North Carolina has issued a report, in which it shows that the length of the school term in the state varies from 120 days in many rural schools to 185 days in Asheville, one of the larger city school systems.

The report indicates an increase in the average length of the school term at each interval. While the increase in the average length of the term has been largely in the rural schools, the average rural-school term has been doubled, while the term in the city schools has increased only 8.6 days. However, the city term is yet 26.7 days longer than the average rural term.

In 38 counties, there are only 2,328 white children not given the opportunity of schools running eight months. It is seen that over 95 per cent of the 121,532 rural-elementary children not provided with the advantage of an eight-months' school term are in 62 counties. On the other hand, there are eight counties that still have a large number of pupils in schools having terms of less than eight months. More than 25 per cent of the children not provided with long-term schools are in these eight

counties. There are 53 counties with 75 per cent of their enrollment in long-term schools. All of the city schools provide long-term schools, most of which operate for full nine months.

THE SCHOOLMEN'S CLUB OF WASHINGTON

The Federal Schoolmen's Club, an organization of prominent educators in the Nation's capital, is "carrying on" as usual after 22 years of service. The membership is composed of an interesting and distinguished group of school officials and instructors and includes all classes of educational workers. The membership is limited to 125 in number. Dinners and meetings are held on the first Saturday of each month, from October to April, inclusive. The officers of the club include Dr. C. H. Marvin, president of George Washington University, president; Dr. W. C. John, of the U. S. Office of Education, secretary; and Dr. John A. Chamberlain, of Washington, treasurer.

—Sisterville, Va. With the opening of the new fiscal year, an accounting system complying with state requirements has been placed in operation. The new system provides in concise form, all the information which the school board, or its executive officers may require at any time.

—Grand Rapids, Mich. In a recent decision reversing a ruling of the lower court against the board of education in condemnation proceedings to acquire part of a school site, the supreme court has approved the "pay as you go" policy of the board in building schools. The lower court had dismissed the board's condemnation petition for the piece of property for want of the proper proof of necessity. No appropriation had been made for the gymnasium contemplated on the site, because this piece of property was not required for the school building itself.

—The Linwood School at Cincinnati, Ohio, was opened with an appropriate program. The principal addresses at the evening session were made by William J. Schroder, president, board of education, and by Dr. Edward D. Roberts, superintendent of schools. During the afternoon session Charles Otterman and J. D. Stover, assistant superintendents of schools, were the speakers. George H. Davis, the principal, presided.



The new Washington High School, Lorain, Ohio, painted throughout with Barreled Sunlight.

Their Business Manager chose interior paint in a *businesslike way*..

THE Board of Education at Lorain, Ohio, had completed a new high school. They were in the market for interior paint. So they secured samples of eight "standard makes." Tested them carefully. And then chose Barreled Sunlight.

"Tests were made," they say, "for hiding qualities, covering power and ease of application."

True enough, Barreled Sunlight *does* spread over a larger area, has greater hiding power, is easy to apply. But in the opinion of many users these qualities, while highly desirable, are a secondary consideration.

Marked resistance to dirt... a high degree of light reflection... ease of washing... these are the characteristics that explain Barreled Sunlight's popularity with school boards the country over.

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U. S. Gutta Percha Paint Co., 44-D Dudley Street, Providence, R. I. Branches: New York—Chicago—San Francisco. Distributors in all principal cities. (Distributors for Pacific Coast, W. P. Fuller & Co.)



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Easy to Tint

Any desired shade is obtained by simply mixing ordinary colors in oil with Barreled Sunlight white. Quantities of five gallons or over are tinted to order at the factory without extra charge.

BOARD OF EDUCATION
BUSINESS DEPARTMENT
LORAIN, OHIO

W. A. PILLANS
BUSINESS MANAGER

REPLYING TO

SUBJECT

DATE November 15, 1929

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Providence, R. I.

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Tests were made for hiding qualities, covering capacity and ease of application.

We are highly pleased with the results obtained.

Very truly yours

W. A. Pillans
Business Manager

WAP:MP

U. S. GUTTA PERCHA PAINT CO.
44-D Dudley Street, Providence, R. I.

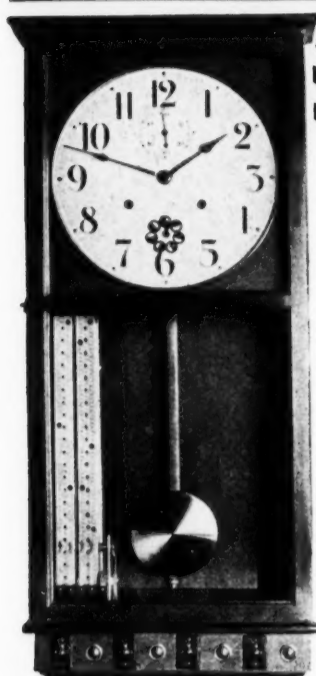
Please send us further information and a panel painted with Barreled Sunlight. We are interested in the finish checked here.

Gloss ☐ Semi-Gloss ☐ Flat ☐

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City _____ State _____



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entirely me-
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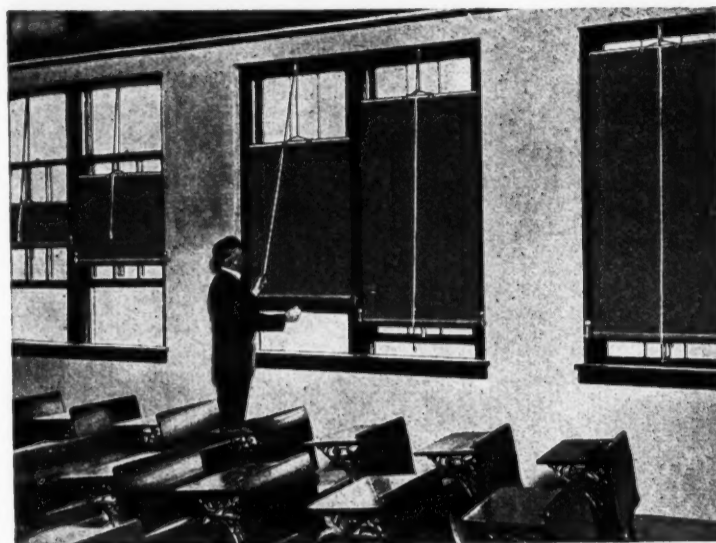
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Spiceland, Indiana

THE SOUTHWICK CONSOLIDATED SCHOOL

(Concluded from Page 63)

portation at each end of the day is approximately 50 minutes. The daily travel of each bus is approximately 24 miles. No child is required to walk further than under the old system, while a large portion of the pupils are taken at their homes.

The educational advantages afforded by this type of school are apparent. After six months of service, it appears that the operating expense under this plan will not exceed that of the old

system. While the school was not built as a measure of economy, it is gratifying to see that it will very likely prove financially advantageous as well as educationally efficient.

Approximate Costs	
Building	\$63,000
Lot	7,000
Grading etc.	1,000
Water	1,000
Septic Tank	1,000
Busses	5,000
Furnishings	5,000
	<hr/>
	\$83,000



ASSEMBLY AND PLAY ROOM, SOUTHWICK CONSOLIDATED SCHOOL,
SOUTHWICK, MASSACHUSETTS
Malcolm B. Harding, Architect, Westfield, Massachusetts

SCHOOLHOUSE DEDICATIONS

—The high school at Cadiz, Ohio, was opened by John L. Clifton, state director of education. A memorial tablet in honor of Kate Simmons, a former teacher, was presented. Architect Charles W. Bates presented the building. Rupert Bucham, president of the school board, made the acceptance speech.

—The \$325,000 high school at Laramie, Wyoming, was opened with a festive program. Dr. A. G. Crane, president of the University of Wyoming, delivered the dedicatory address. Over 2,000 persons attended.

—A new school was opened at Pettisville, Ohio, with a dedicatory address by John L. Clifton, state director of education. A. Banty Huber, president of the board of education, presided.

—The Colonel William J. White Junior High School at Dayton, Ohio, was opened with appropriate ceremonies. Dr. E. B. Bryan, president of Ohio University, was the principal speaker. The building was formally presented by Joseph N. Garwood, president of the board of education, and accepted by Paul C. Stetson, superintendent. Paul E. Cromer, principal, presided. The cost of the building is \$636,000.

—The new high-school units at Davenport, Iowa, were informally opened to the public. A formal dedication followed. The cost of the building is \$45,000.

—The auditorium of the Shore High School at Northeast Euclid, Ohio, was opened with a concert given by the high-school band.

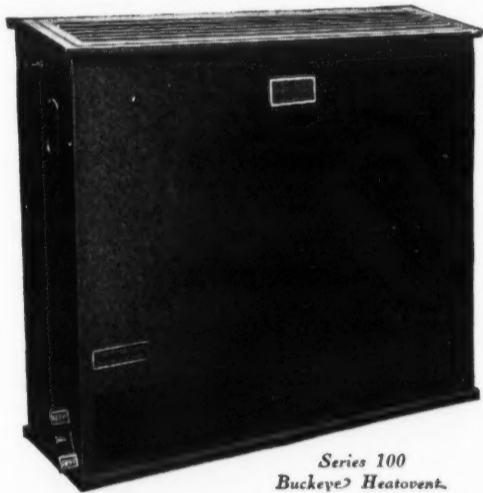
—The Albert E. Smith school at Riverview, (Wyandotte), Mich., was formally opened. L. S. Davidow spoke on behalf of the school board. A description of the building by W. S. Holmes, architect, followed. The principal address was delivered by C. L. Goodrich, deputy superintendent of public instruction. The cost of the school was \$90,000.

—Chattanooga, Tenn. By a majority vote the past summer, six suburbs were annexed to the city, making a Greater Chattanooga, with a population of 130,000. The annexation, which brought eleven schools into the city, has raised the total number of city schools to 41.



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Book News and Reviews

STATE PUBLICATION OF TEXT-BOOKS EXPOSED

Periodically some member of a state legislature proposes that his state engage in the printing of its own schoolbooks. The promise of a substantial saving in cost prompts the proposal. An inquiry into the feasibility of such a project usually results in turning to the experience of the State of California where a state printing plant, engaged in producing schoolbooks, has been in operation for some years.

A review of the subject shows that some nineteen states have engaged in studies of the same which have been more or less exhaustive, and which cover practically every essential phase of the subject. In each instance the investigators have come to the conclusion that the state schoolbook scheme is economically unwise and educationally inexpedient.

Thus, a few years ago the State of Washington, through its state teachers' association, concerned itself with state textbook publication, and analyzed the scheme as exemplified in California. The association asked three questions: (1) Will textbooks under state publication be as good or better than those now in use? (2) Will state publication mean a financial saving to the people of the state? (3) Do those familiar with school affairs in states now having state publication approve the plan? The answers in substance were:

1. The books are decidedly inferior in pedagogical content and educational value. High per-capita cost or inferior mechanical product is the inevitable result of state printing.

2. Any change from the present system to one of state publication would unquestionably involve either waste if an immediate change is made or serious teaching difficulties during the years required for gradual change.

3. "Owing to the fact that inferior and obsolete texts are common under state publication, thereby seriously crippling the school system, and that state publication will not result in a definite financial saving to the people of the state, we, the representative assembly of the Washington Education Association, go on record as being definitely opposed to state publication of textbooks in the State of Washington."

In Oregon, the Grange and Labor Federation having indorsed state printing of textbooks, the state legislature appointed a commission to study the subject and report. The subject still hangs fire, but the *Oregon Voter*, a magazine devoted to good government, believes that the findings secured by Mississippi, which are strongly opposed to the state schoolbook scheme, will also prevail in Oregon. The testimony of California educators is, in the main, condemnatory of the scheme.

What Mississippi Found

The most recent study on the California experiment is submitted by William P. Hubbard, a San Francisco attorney, who was engaged by the Mississippi Press Association to make an impartial inquiry and to present the facts in the case as he found them.

Mr. Hubbard found, first of all, that the printing scheme was firmly entrenched in the governmental machinery of the state and strongly defended by the political factors. In glowing reports they claim that the state saves thousands of dollars each year by printing its own schoolbooks. It is deemed quite natural that the political organization which has been built around the scheme of state printing should defend itself against any attempt to abolish the same.

An impartial inquiry, such as Mr. Hubbard presents, in which the whole case is bared to public judgment, deserves the attention of the open-minded citizen. Attorney Hubbard before presenting his own conclusion presents an array of testimony which would fill a good-size volume expressing the views of California educators, journalists, and public men, who uniformly condemn the system. Only a few extracts taken from the mass of opinions can here be given. One California state superintendent of public instruction says:

"Whatever may be the advantages claimed for state publication by believers in a paternal plan of government, the result of the experiment in our state shows that it costs the state more to manufacture the books than it would cost a private publishing house—for obvious reasons. Besides this, there is, in a state series, a lack of spontaneity and competition in authorship."

Another California educator says: "I am compelled, with personal reluctance, to acknowledge to the comparative want of success in our California experiment in making and publishing schoolbooks. Taking into consideration the large appropriations made and the further and constant outlays for revisions, new plates, etc., the same number of books can be purchased in the open market at wholesale prices for less than it costs the state to manufacture them."

Expensive and Unsatisfactory

Many similar expressions by prominent educators and school journals might be cited. The California State Teachers' Association adopted the following:

"RESOLVED, that in the opinion of this Association, the publication of school textbooks by the state is inexpedient and impracticable, and will, if attempted, result in great pecuniary loss to the state, and expensive and unsatisfactory books to our schools."

The San Francisco *Chronicle* makes this observation: "The experience of California covers about all form of providing and distributing school textbooks, from the go-as-you-please plan with which we began business to the adoption of a uniform series by a legislature which knew nothing about the matter and cared less, and thence through county and city independent adoptions to state uniformity in the use of books written by local educational lights at so much a month, rewritten by a 'literary proof-reader and editor-in-chief,' and then printed at the state printing office, and sold at 'cost,' which was something more than books of the same size were sold for elsewhere, after having been pur-

chased from the wicked and notorious book ring."

Dr. Ellwood P. Cubberley, of Stanford University, discusses the subject quite exhaustively and concludes with the following: "One often wonders how long the people of California, Kansas, or any other state will continue building schoolhouses as architects direct, and equipping them with all needed teaching devices; employing teachers who have been trained at public expense, and selected with care; paying good salaries to superintendents of schools to direct the education of youth and efficiently manage the schools; and then continue to ignore all expert advice as to teaching tools, and allow politicians to determine plans for textbooks that affect the education of millions of children—all because they promise a little pecuniary saving—when the prime question is not cost, but quality and teaching."

William P. Hubbard, who submits his recent study for the State of Mississippi, in a lengthy brief, closes with the following:

"I appeal to you to protect your school system from the political incubus of a state printing plant. Remove your public schools as far as possible from all political influence and subjection. Do not undertake to invest your hard-earned tax money in such an enterprise. . . . Reject this utopian political dream as nineteen sister states have intelligently done after a careful, thorough and painstaking investigation. Let Mississippi place herself where she belongs, along with the other progressive states and not in the class of prehistoric curios, in attempting to conduct a printing plant to print its school textbooks as California and Kansas have done."

NEW BOOKS

Score Card of School-Building Sites

By N. L. Engelhardt. Published by Bureau of Publications, Teachers College, Columbia University, New York City.

This score card follows the familiar technique which has been used by Drs. Strayer and Engelhardt in their score cards for school buildings. With the exception of one point, that of the size of sites, it may be said that the sheet is based upon defensible objective bases. To say that a high-school site must contain 20 acres, a junior-high-school site 10 or more acres, and an elementary-school site 5 or more acres is to set up absolutely arbitrary standards that cannot be defended. So many variables enter into the desirable size of a school site that what is absolute waste in one case may be an absolute essential in another. It would seem that a more objective and even scientific basis for determining the size of a school site would be to take into account the number of pupils in the school, the program for outdoor physical education, the cost of land, the financial ability of the district, etc.

Benjamin Franklin Modern Business Training

By E. H. Peterson. Athol leather bound, 448 pages. Published by the E. H. Peterson Corporation, Waukegan, Ill.

The book is presented in loose-leaf form. Each lesson is held as a separate unit. The whole covers the subject of bookkeeping, accounting, financing, and business management. The author also deals with the subject of income-tax account keeping.

The student is taken through a series of lessons which range from the simple to the complex. The author brings to his task a splendid mastery of the entire subject of account keeping.

The Merchant of Venice

A Midsummer Night's Dream

By William Shakespeare. Cloth, 139 pages. Price, 60 cents. The Macmillan Company, New York City.

Another valuable combination volume in the New Pocket Classics Series. Solid editorial work, excellent typography, and handy size are to be noted.

New Laboratory Experiments in Practical Physics

By N. Henry Black. Cloth, 263 pages. Price, \$1.12. The Macmillan Company, New York City.

Two features of this revised book are of interest:

(1) Each experiment is preceded by an introduction explaining the significance of the problem and its relation to other parts of the book. (2) Extreme flexibility is provided for in optional experiments, problems, and tests.

(Concluded on Page 152)



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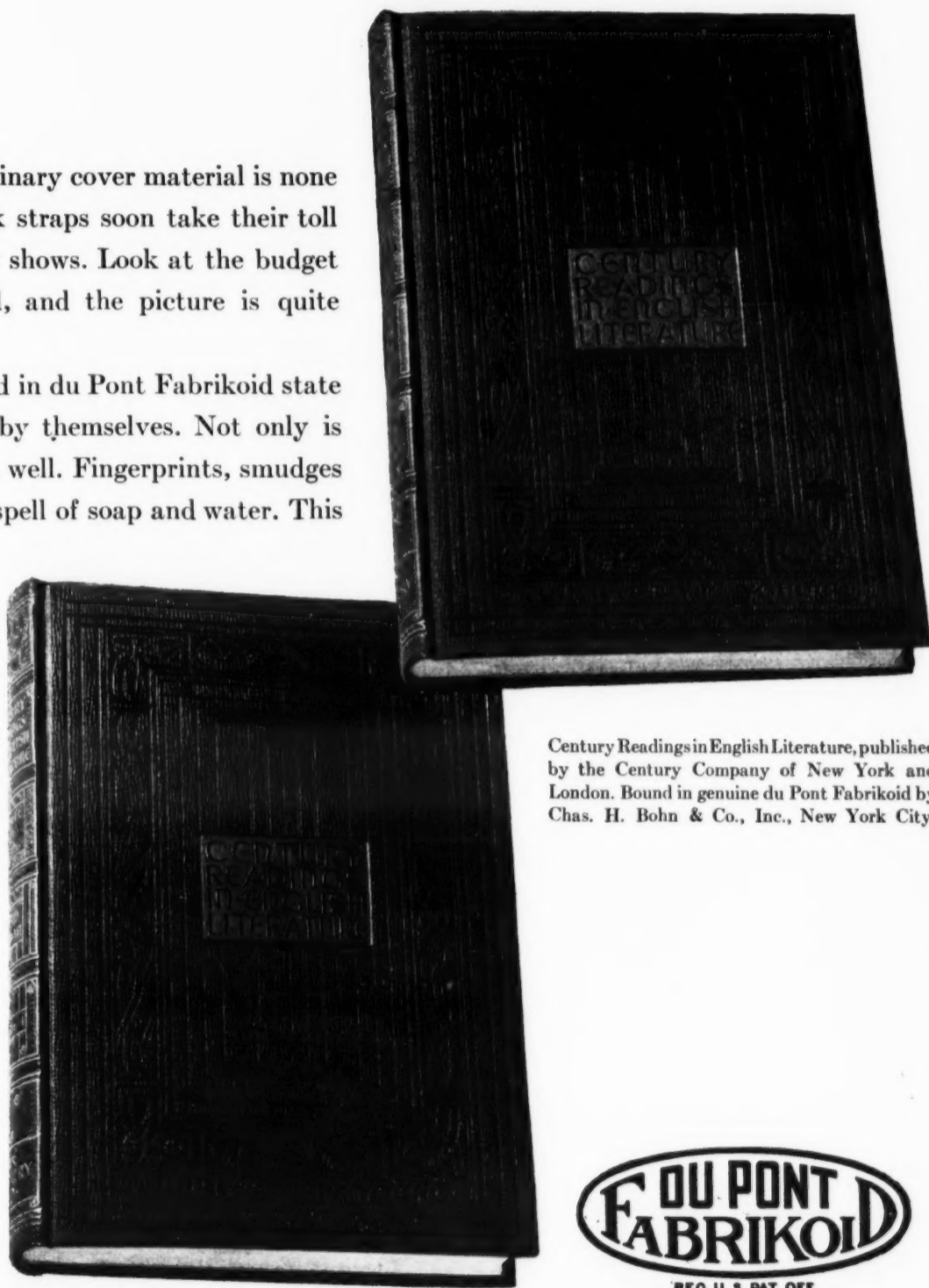
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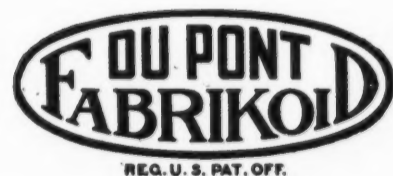
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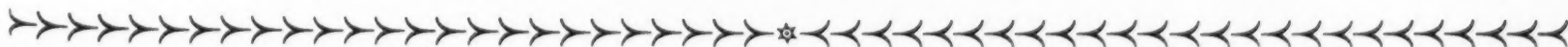


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AMERICAN BOOK COMPANY

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Chicago, Illinois

NEW YORK CINCINNATI CHICAGO BOSTON ATLANTA

(Concluded from Page 150)

Plane Geometry

By Joseph A. Nyberg. Cloth, 286 pages. American Book Co., New York, Chicago.

Solid mathematical scholarship and the application of newer ideas in secondary-school teaching distinguish this book. The work will fit a rather complete course.

Principles of Woodworking

By Herman Hjorth, M.S. Cloth, 307 pages. Published by The Bruce Publishing Company, Milwaukee, Wis.

In recognition of the fact that wood enters into the construction of more manufactured articles than does any other material, the author deals with his subject in quite a comprehensive and illuminating fashion. He points out in his preface that "a material, which enters so extensively into every phase of life, is of tremendous economic value to all civilized nations. The woodworking industries in this country, particularly the building and furniture industries, are among the most important, because they employ thousands of highly skilled workmen, designers, and artists, to produce useful as well as beautiful articles of wood. Other thousands are engaged in the distribution and selling of these products, and still other thousands in the manufacture of the numerous tools and machines used in woodworking."

The introductory chapters are given over to the kind, and the use, of hand and machine tools commonly employed in woodworking industries. Attention is also given to the care of tools.

Several chapters are devoted to planning and squaring to dimensions, the making of joints, gluing and clamping, wood turning, and surface decorations. The subject of upholstery is set forth. Instructive lessons are afforded on the botanical division of trees, the porous character of wood, its weight and treatment of industrial use. Attention, too, is given to a series of applied projects.

The book is illustrated throughout. These illustrations not only cover a great variety of tools, the processes of construction, but also show the finished product. Every chapter is followed by review questions.

Modern Methods in Teaching Geography

By Claude C. Crawford and Lois P. McDonald. Cloth, 306 pages. Price, \$1.90. Houghton Mifflin Company, New York, N. Y.

Both administrator and teacher will find much that is new and useful in those sections of the book which suggest practical classroom methods and devices.

Modern-School Arithmetic

By J. R. Clark, A. S. Otis, and C. Hatton. Cloth, 400 pages. World Book Co., Yonkers, N. Y.

To the practical application of the newest research in method, learning difficulties in number, remedial teaching, and standard testing, the authors have added a very human touch of child interests and the constant application of number to child-life situations.

Management of Reading Programs in Social Studies
By William Glenn Kinnel. Paper cover, 110 pages. Published by McKinley Publishing Company, Philadelphia, Pa.

This is one of the publications of the National Council for Social Studies. The purpose of the book is to stimulate reading in social studies and to offer some intelligent guidance in that direction. Thus, suggestions are made as to the amount of reading to be undertaken, programs to be prepared, and their place in secondary education. A helpful bibliography is provided.

Measurement of Appreciation in Poetry, Prose, Art, and Studies in Appreciation

By Robert K. Speer. Cloth, 78 pages. Price, \$1.50. Bureau of Publications, Teachers College, Columbia University, New York, N. Y.

A study of the psychological elements of art appreciation.

Busy Carpenters

By James S. Tippet. Cloth, 88 pages. World Book Co., Yonkers, N. Y.

Quite as charming and fresh as the author's *Singing Farmer* is this little reader with its building activities, its description of city life, and its rhythmic story forms. Second-grade teachers will find that it is equally useful for rapid reading, exercises, and for reading with pure enjoyment.

Survey of College Entrance Credits and College Courses in Music

Prepared by the Research Council of the Music Supervisors National Conference in cooperation

with the National Bureau of the Advancement of Music. Cloth, 210 pages. Price, \$2. National Bureau of the Advancement of Music, New York, N. Y.

A survey of the growing practice, in some 600 junior and senior colleges, in giving credit for music study at the secondary-school level.

Instructional Tests in Physics

By Earl R. Glenn and E. S. Obourn. Paper, 60 pages. World Book Co., Yonkers, N. Y.

These tests cover the entire field of mechanics, heat, sound, and electricity. They have been worked out at the advanced high-school and beginning-college levels and are not standardized. Their purpose is similar to that of a most valuable group of teachers' aids which is now being worked out and which, from the standpoint of the individual teacher and individual student, serves a far more valuable purpose than standardized tests.

The present material will enable both teacher and student to check the progress of the latter as he completes each important unit in physics, and will enable both to apply remedial measures. In physical form all of the vast amount of experience of recent years in developing test material has been used.

The instructional material on which the tests are based have practically as wide an application as those of a standardized test and are applicable to any course of study or any textbook. The publication is to be heartily commended. A key, directions for scoring, and a teachers' manual accompany the test.

Instructional Tests in Chemistry

By Earl R. Glenn and L. E. Welton. Paper, 76 pages. World Book Co., Yonkers, N. Y.

These tests have been developed very much like those of Messrs. Glenn and Obourn in the field of physics and have the same general arrangement and advantages. Perhaps the most interesting feature of the tests, over and above the teaching values, is the fact that basic theories and new hypotheses are present without leading the student astray in strictly debatable fields.

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THE INTIMATE PAPERS OF COLONEL HOUSE. Charles Seymour. Vols. 1 and 2. Illustrated. 1926. (\$10.00), **\$2.68**

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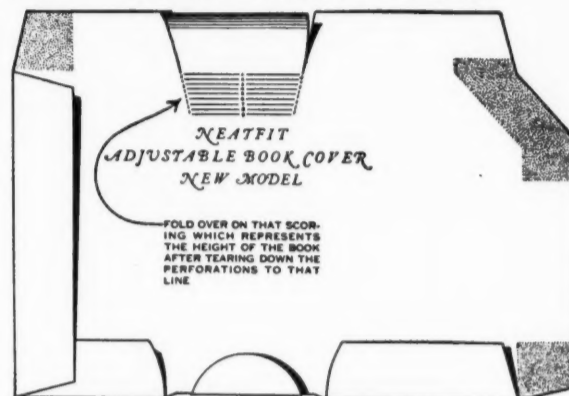
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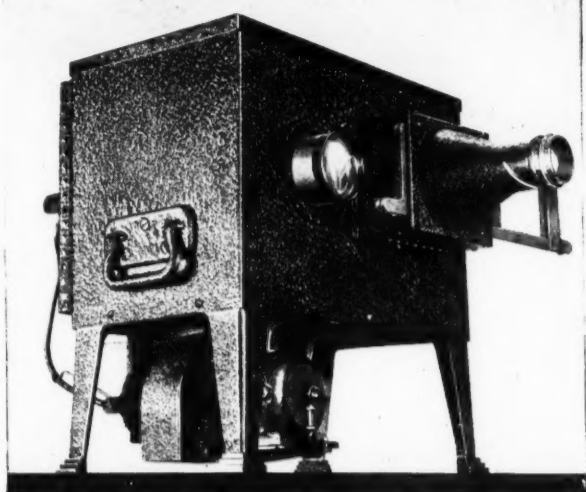
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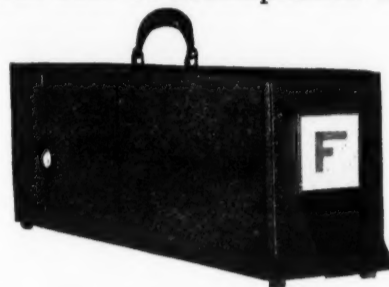
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PUBLICATIONS RECEIVED

Statistics of Public High Schools, 1927-28. By Frank M. Phillips. Bulletin No. 35, 1929. U. S. Department of the Interior, Washington, D. C. This report, which includes data from 18,000 public high schools, contains information about the number of schools of various types, the number of administrators, the number of teachers, the number of students, the subjects taught, the number of graduates, and a statement of property valuations. The report shows that the total enrollment in all high schools reporting for 1928 was 4,217,313, 20.5 per cent of which was in grades below the last four years of the secondary school. The enrollment in the regular high-school years was 3,345,473. A total of 11,555 high schools offer four years of high-school work; 11,479 follow eight years of elementary-school work; 2,272 follow seven years, and 39 follow nine years of elementary-school work. These schools enrolled 2,256,463 pupils and employed 62,020 teachers in 1928.

Development and Use of a Composite Achievement Test. By Wendell W. Wright. Bulletin No. 3, January, 1929, Indiana University, Bloomington. This study had for its purpose the development of an improved and practical plan for seventh- and eighth-grade promotion in Indiana rural schools by a new-type examination or standard test. As a result of the tests, it was shown that the rating of ninth-grade pupils on traits by high-school teachers and principals, shows significant correlation between trait "ability" and success in ninth grade. Teachers' marks, made out with the use of the Indiana test, show a higher predictive value than the Indiana test alone, or marks used alone. It was found that the pupils who ranked in the lowest 25 per cent of the distribution of the Indiana test, and who went into high school, showed a marked tendency to fail in one or more subjects, unless they were rated high on the trait "industry."

Prohibition. Bulletin No. 1 of the series on Handbooks for Citizenship. By R. W. Kelsey. Paper, 32 pages. McKinley Publishing Company, Philadelphia, Pa. This booklet is to be used in connection with a textbook on American history and government. It is suitable for high school as well as college classes and presents historical facts and arguments for both sides of the debated question. Some of the topics taken up cover prohibition in practice, educating for prohibition, and enforcement difficulties.

Farm Relief. Bulletin No. 2 of the Handbooks on Citizenship. By R. W. Kelsey. Paper, 32 pages. McKinley Publishing Company, Philadelphia, Pa. A topical

supplement dealing with the farm-relief problem. It discusses the farm bloc, the farm-relief act of 1929, and export debentures. There is a bibliography, a list of discussion materials, and practical topics for discussion.

The Tariff. Bulletin No. 3 of the Handbooks on Citizenship. By R. W. Kelsey. Paper, 32 pages. McKinley Publishing Co., Philadelphia, Pa. The booklet takes up in topical form the problem of tariff protection, beginning with its historical background, and ending with the Hawley tariff bill in 1929. It takes up the bankers' manifesto, tariff developments in 1928-29, the problem of a flexible tariff, and the enactment of the Hawley tariff bill in 1929. There is a bibliography, a list of current references, discussion material, and suggestive topics for discussion.

Celebrating May Day in 1929. Paper, 98 pages. Issued by the American Child Health Association, New York City. A report of the work as it was conducted in the various states during 1929. The booklet has been sent out to serve as suggestions for the conduct of similar activities in 1930.

SCHOOL ADMINISTRATION

—At Breckenridge, Texas, the school janitor-engineers are occasionally called into conference by Supt. N. S. Holland. They are asked to make suggestions leading to cleaner and better-kept school buildings. Superintendent Holland finds that they work hardest when their work finds appreciation and when principals and pupils maintain a co-operative attitude.

—The board of education of Buncombe county, N. C., has won its fight for maintaining its purchasing department separate and distinct from the general county purchasing agency. The state supreme court has issued an order directing H. E. Walter, county auditor of Buncombe county, to approve requisitions and sign vouchers issued by the purchasing agent for the school board. The court, in its decision, ruled that the county board of education is not a part or a department of the county government, but is a part of the state school system in dual relationship.

—Grand Rapids, Mich. The school board has adopted a tentative budget, calling for an appropriation of \$4,754,000. Of the total, \$2,103,622 is to be devoted to general school purposes, and \$1,292,148 to capital outlay and interest.

—More than 40,000 boys and girls entered the high schools of New York City at the beginning of the second term in February, bringing the total high-school enrollment up to 167,257, according to a statement issued by Associate Supt. Harold G. Campbell, in charge of secondary schools. Of the 40,000 admissions, 20,662 were from the elementary schools, 9,533 from the junior high schools, 1,831 from the parochial schools, 5,678 were transferred, and 2,917 were from other institutions. The New Utrecht High School, the largest of the city high schools, has a total enrollment of 8,706 students. The Borough of Brooklyn, with 65,831 students, lead: in the number of students, while Richmond, with 4,414 students, has the smallest number.

—Grants Pass, Oreg. The public-school system has had an unusual increase in school enrollment this year. The increase in the city as a whole was over 12 per cent, while the high school increased more than 20 per cent over last year's enrollment.

—Philadelphia, Pa. By a unanimous vote, the school board's committee on schools has rejected a plan to release school children one hour a week to receive religious instruction in the several churches. The plan was defeated on the ground that it ignores the principle of separation of church and state, and that it has a tendency to divide pupils into sectarian groups.

—Bonds in the amount of \$450,000 have been sold by the school board of Amarillo, Tex. The bonds were sold at par, with accrued interest plus \$240 bonus, and brought 5 per cent.

—Fort Dodge, Iowa. The voters have approved a \$225,000 school bond issue.

—A bond issue of \$185,000 has been approved for a school building at Algoma, Iowa.

—Pacific Grove, Calif. The citizens have approved a school-bond issue of \$70,000 to be applied toward a building fund for school-building purposes. It is planned to build an auditorium, with seven additional classrooms.

—Altona, Ill. By a vote of more than two to one, the citizens approved a bond issue for an addition to the school building.



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—The citizens of Del Rio, Tex., recently approved a school-bond issue of \$185,000 for school-building purposes. The proceeds of the bonds will be used for the erection of a senior high school and for additions and improvements to existing buildings.

—East St. Louis, Ill. Dr. J. T. Murphy, chairman of the finance committee of the board, recently made a vigorous criticism of the present system of making purchases for the school system. A number of months ago Dr. Murphy made a similar criticism, declaring supplies for school needs should be purchased in wholesale lots, by a purchasing agent of the board. He protested against the custom of individuals making purchases at retail stores and charging the same to the school board. He pointed out that the board has been paying retail prices for articles which could just as well be supplied the schools in wholesale lots, at great savings to the taxpayers.

—Indianapolis, Ind. A longer school day with no homework has been proposed by Mr. K. V. Ammerman, principal of the Broad Ripple High School. Mr. Ammerman proposed a plan that would make the school day extend from 8:00 a.m. to 5:00 p.m., with regular study periods at school. He pointed out that with 60-minute periods, problems could be discussed and more laboratory work carried on in recitation periods.

—At Akron, Ohio, the cost of high-school graduations is under consideration. Supt. Thomas E. Gosling in attempting to simplify graduations, finds that "some families are taxed as high as \$200 to finance graduation parties, clothing, and fixings." The *Akron Times-Press* comments as follows: "But Mr. Gosling is quite right, and parents should join him in frowning upon ceremonies which are so costly as to render the occasion an unhappy one for the student who, by reason of poverty cannot fully participate. No sensible parent, however wealthy, will enjoy making some youth feel downcast because he is shabby in comparison with more fortunate boys and girls."

—Rosenwald School Day was observed on March 7 in the State of North Carolina. It was the second

annual negro school improvement day, the first having been observed last year. Statistical data prepared by the division of negro education shows that the Rosenwald Fund appropriated this year \$2,000 aid as one third of the cost of 50 libraries for schools, at \$120 each. There were 750 Rosenwald buildings erected in North Carolina, at a total of \$4,587,813. The Rosenwald Fund contributed to date for negro health and education in North Carolina the total sum of \$980,987.

—"Although we are proud of our rank in the sisterhood of states as measured by the various indexes that have been proposed, we appreciate that New Jersey is upon the threshold of a new era in educational development," recently said Dr. Charles H. Elliott, state commissioner of education for New Jersey. "Whereas we recognize the need for development in certain fields of administration and in the great fields of practical education, nevertheless, our profession in the state has for a long time been interested in the movements that have to do with more complete development of the individual."

—The State of New York reports that 15,000 children were transported last year to and from union, free, central, and consolidated school districts without a single fatality. Also 2,300 pupils were transported in common-school districts.

The complete figures for the school year 1927-28 indicate that there were 446 conveyances in daily use. Of these 446, 284 were motor vehicles, exclusive of public service conveyances, 60 were horse-drawn vehicles and 102 were public service conveyances, including trains, trolleys and motor busses. These conveyances made a total daily mileage of 5,543.9 miles on a basis of two round trips a day.

—B. C. Smith, the newly elected president of the board of education of La Crosse, Wis., in his inaugural address said: "The form of contracts that we have with our teachers gives this board no protection against handing in their resignation during the year, breaking their contract and we have no redress. We sign contracts with them and still they get married and quit when they have a chance to get a better position and we sit here

perfectly helpless. I would recommend that a new form of contract be drawn up that will not be a one-sided affair, but one that will protect the city as well as the teachers."

**A TESTING PROGRAM AT SIOUX
CITY, IOWA**

The school board of Sioux City, Iowa, has adopted a new testing program for the second semester, which calls for achievement tests in the senior sixth grade, arithmetic diagnostic tests in the fourth to the eighth grades, and intelligence tests in the grades and high school.

All tests, with the exception of the high-school intelligence tests, are given under the direction of the principal of the buildings. The giving and tabulating of the tests is carried out by the teachers, under the direction of the principals.

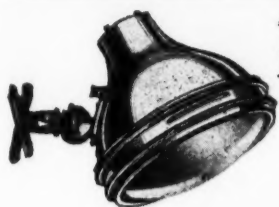
DEATH OF BOARD MEMBER

MR. DUNCAN B. WOLCOTT, for the last twelve years a member of the school board of Kent, Ohio, died at his home in that city on March 17, following a brief illness.

Mr. Wolcott was born in Kent in May, 1873. After completing his common-school education, he attended Western Reserve Academy and the law school at Western Reserve University. With the exception of a year in Cleveland, Mr. Wolcott had resided in Kent. He had served continuously as a member of the board during the period from 1918 to December, 1929, when he retired from active service.

Mr. Wolcott was a respected and valued member of the board, and during the twelve years of his membership, the school system of Kent made great progress. He was especially interested in school buildings and was active in promoting the erection of new buildings.

—SUPT. G. W. GOTKE, of Brownsville, Tex., has been reelected for another two years, as head of the local school system and president of the junior college.



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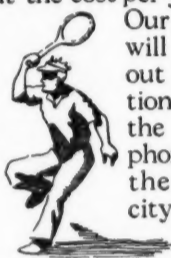
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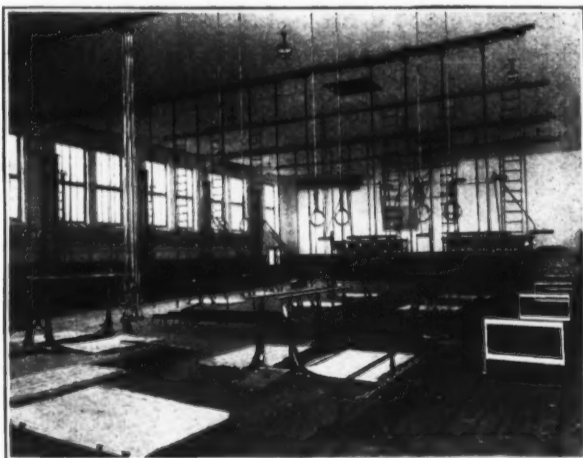
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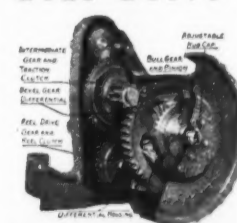
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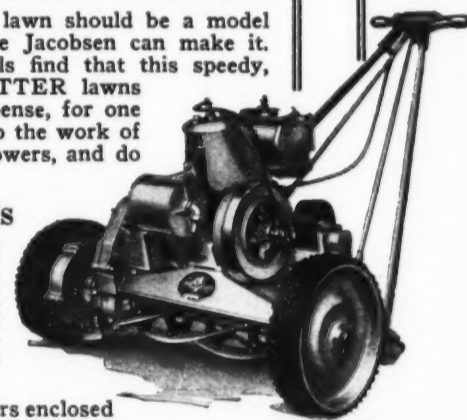
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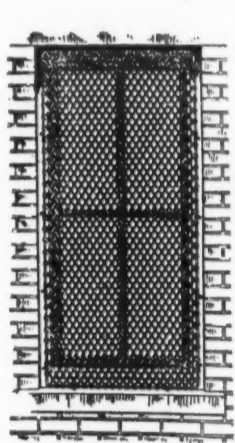
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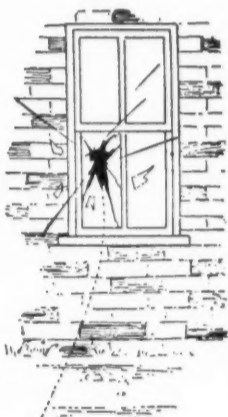
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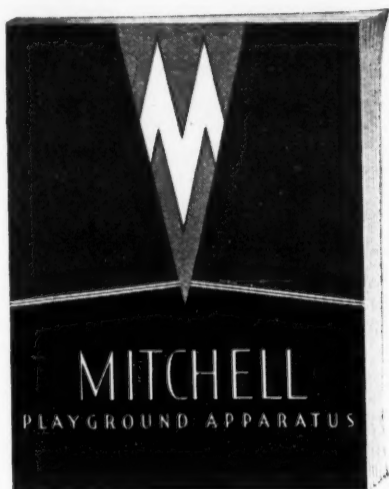
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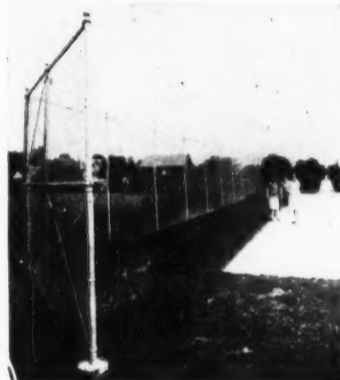
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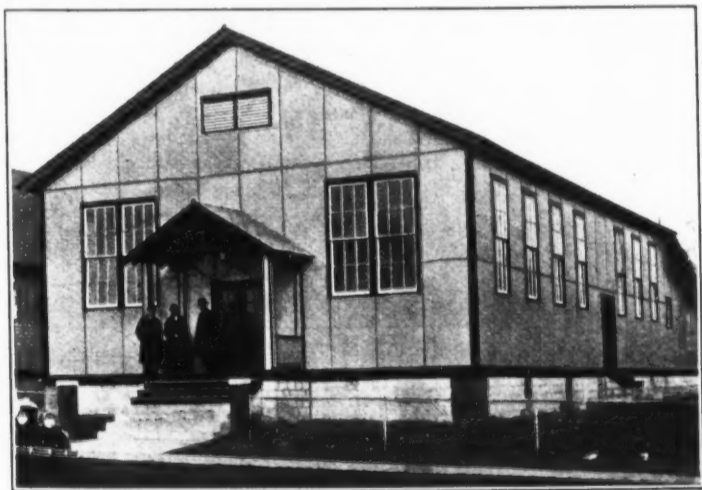
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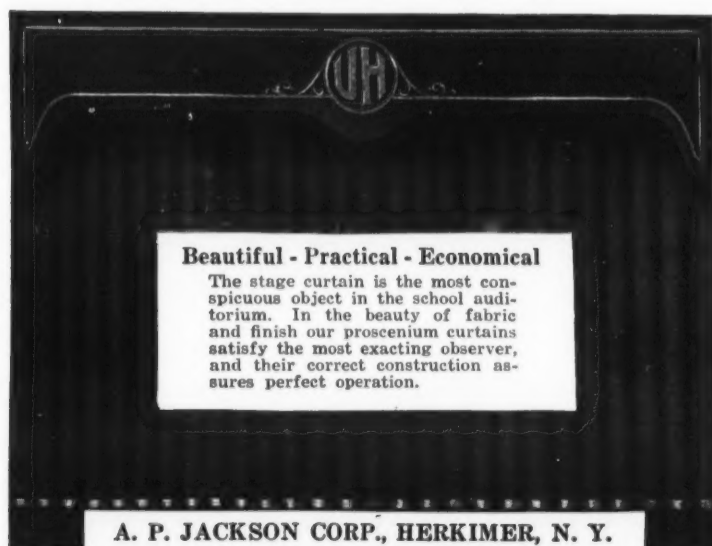
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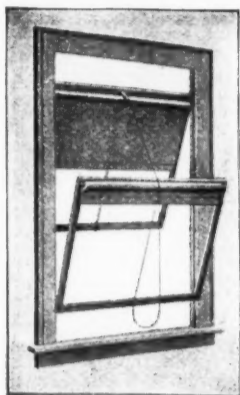
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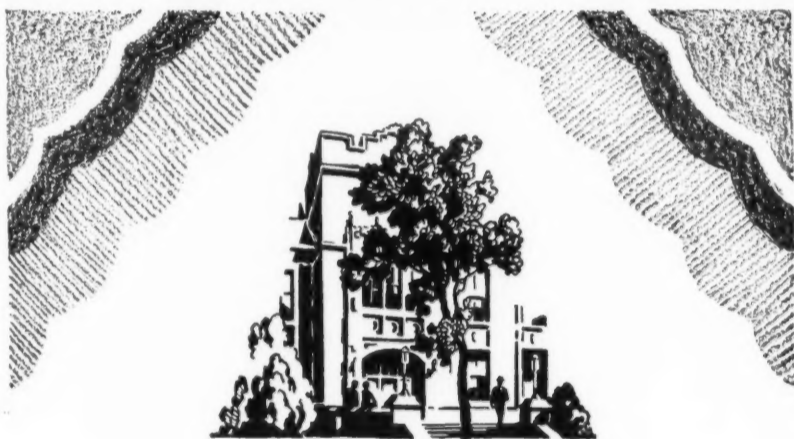
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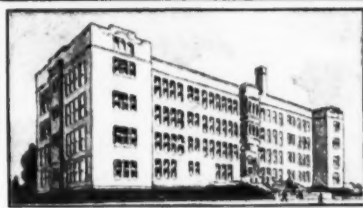
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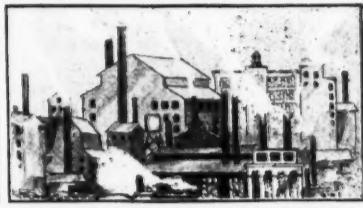
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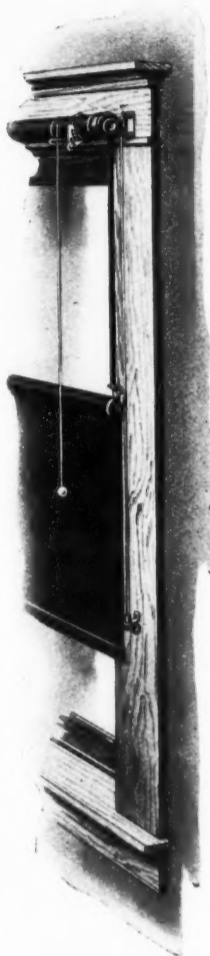
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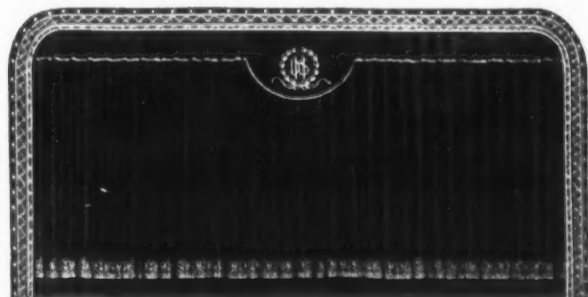
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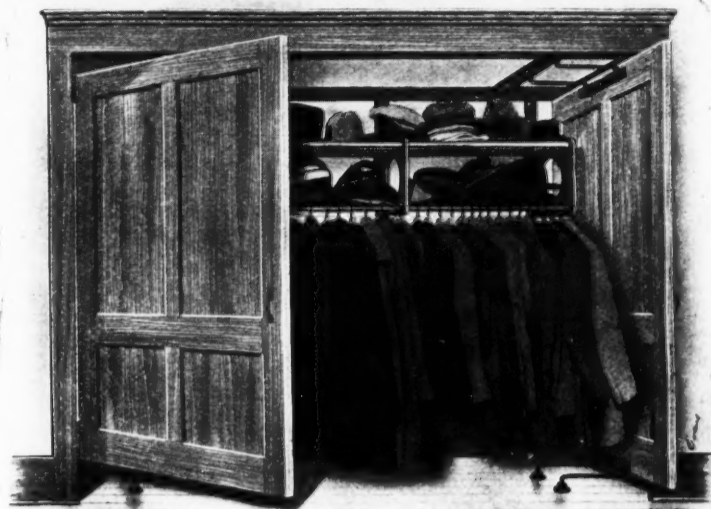
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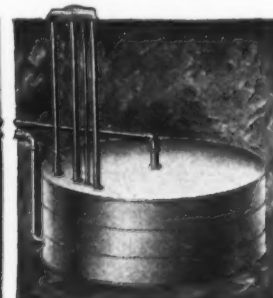
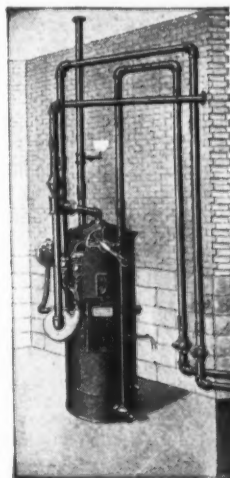
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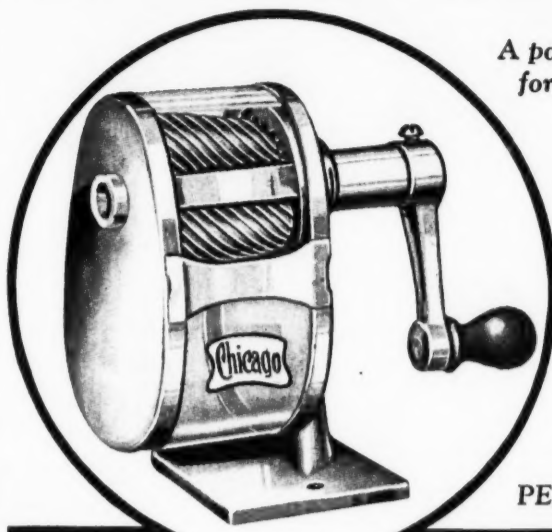
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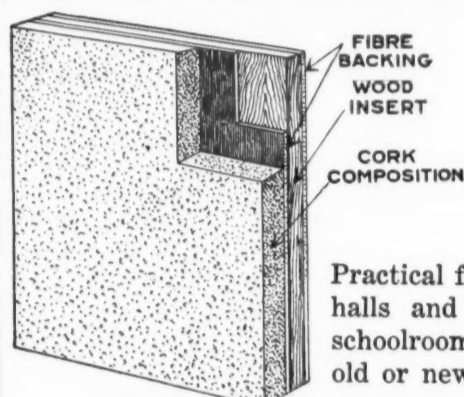
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The firms listed below include the leading and most reliable manufacturers and dealers in the country. None other can secure a place in this directory. Purchases from these firms can be made with a positive assurance of satisfaction.

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Celotex Company, The
Johns-Manville Corp.

ADJUSTABLE WINDOW SHADES

Athey Company, The
Draper Shade Co., L. O.

AIR CONDITIONING

American Blower Company
Buckeye Blower Company
Nelson Corporation, The Herman

AIR WASHERS

American Blower Company
Sturtevant Company, B. F.

ALUMINUM WARE

Cleveland Range Company, The

ARCHITECTS

(See Schoolhouse Architects' Directory)

ASH HOISTS

Gillis & Geoghegan

AUDITORIUM SEATING

American Seating Company
Heywood-Wakefield Co.
Kundtz Company, The Theodor
Mahoney Chair Company
National School Equipment Co.
Peabody Seating Co.
Rowles Co., E. W. A.
Standard Mfg. Company
Steel Furniture Company

AUTOMATIC TELEPHONE SYSTEMS

North Electric Mfg. Company, The

BAND INSTRUMENTS

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BASEMENT WINDOWS—STEEL

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Truscon Steel Company

BLACKBOARD CLEANERS

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Midland Chemical Laboratories
Oakite Products, Inc.

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N. Y. Silicate Book Slate Co.
Rowles Co., E. W. A.
Standard Blackboard Company
Valleyco Company, The
Weber Costello Company

BLACKBOARD—SLATE

Natural Slate Blackboard Co.
Rowles Co., E. W. A.

BLEACHERS

Circle A Products Corp.
Minter Homes Corporation
Universal Equipment Co.
Wayne Iron Works
Williams Iron Works

BOILERS

Heggie Simplex Boiler Company
Kewanee Boiler Company
Titusville Iron Works Co.

BOILER COMPOUNDS

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Midland Chemical Laboratories

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Remington-Rand Business Service, Inc.

BOOK COVERS

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Iroquois Publishing Company

BOOKKEEPING MACHINES

Remington-Rand Business Service, Inc.

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Beckley-Cardy Company
Bruce Publishing Co.
Greig Publishing Company
Houghton, Mifflin Co.
Iroquois Publishing Company
Laidlaw Brothers
Merriam Co., G. & C.
Union Library Association, The
Winston Co., The John C.

BRONZE TABLETS

Russell & Sons Co., Albert

BRONZE TABLETS, SIGNS, LETTERS

Russell & Sons Co., Albert

BRUSHES

Eagle Soap Corporation
Midland Chemical Laboratories
Milwaukee Dustless Brush Co.

BUILDING MATERIALS

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Common Brick Mfrs. Ass'n, The
Detroit Steel Products Company
Johns-Manville Corp.
North Western Steel Products Company
Sonneborn Sons, L.
Structural Slate Company
Truscon Steel Company

BULLETIN BOARDS

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N. Y. Silicate Book Slate Co.
Paddock Cork Co.
Rowles Co., E. W. A.
Weber Costello Company

BUSES

Dodge Brothers Corp.

BUS BODIES

Wayne Works, The

CABINETS

Park, Winton & True Co.

CAFETERIA EQUIPMENT

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Cleveland Range Company, The
Dougherty & Sons, Inc., W. F.
Pick-Barth Co., Inc., Albert
Sani Products Co., The
Van Range Co., John

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CANVAS GOODS

Tucker Duck & Rubber Co.

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Beckley-Cardy Company
Clarin Manufacturing Co.
Great Northern Chair Co., The
Maple City Stamping Company
Peabody Seating Co.
Stakmore Company
Standard School Equipment Co.

Tucker Duck & Rubber Co.
Wark-Beacon Steel Furniture Co.

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Clarin Mfg. Company
Mahoney Chair Company
Maple City Stamping Company
Peabody Seating Co.
Rowles Co., E. W. A.
Royal Metal Mfg. Co.
Standard Mfg. Company
Tucker Duck & Rubber Co.
Vitek Mfg. Co.

CHALKS

American Crayon Company
Binney & Smith Co.

CHARTS

Weber Costello Company

CLASSROOM FILMS

Eastman Teaching Films, Inc.

CLEANING COMPOUNDS

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Hillyard Chemical Company
Midland Chemical Laboratories
Oakite Products, Inc.

CLEANING PRODUCTS

Eagle Soap Corporation

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Standard Electric Time Co.

CLOTH BLACKBOARDS

Beckley-Cardy Company
N. Y. Silicate Book Slate Co.

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CONCRETE MARBLE

Concrete Marble Company

CORK TILE AND CORK CARPET

Congoleum-Nairn, Inc.

COOKING APPARATUS

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Dougherty & Sons, Inc., W. F.

CRAYONS

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Beckley-Cardy Company
Binney & Smith Co.
Bradley Company, Milton
National Crayon Co.
Rowles Co., E. W. A.
Weber Costello Company

CRAYON COMPASSES

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Weber Costello Company

CRAYON TROUGHS

Dudfield Manufacturing Company
Weber Costello Company

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Truscon Steel Company
Vortex Mfg. Co.

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Celotex Company, The

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Imperial Desk Company
Rowles Co., E. W. A.

DIPLOMAS

Beckley-Cardy Company

DISHWASHERS

Cleveland Range Company, The

DISHWASHING COMPOUNDS

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Midland Chemical Laboratories
Oakite Products, Inc.

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Eagle Soap Corporation
Hillyard Chemical Company
Midland Chemical Laboratories

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Cleveland Range Co.
Dougherty & Sons, Inc., W. F.
Kewanee Mfg. Co.
Kimball Company, W. W.
Peterson & Co., Leonard
Pick-Barth Co., Inc., Albert
Sheldon & Co., E. H.
Van Range Co., John

DOORS

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Richards-Wilcox Mfg. Co.
Roddie Lumber & Veneer Co.

DOORS, STEEL-FIREPROOF

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DRAFTING DEPT. FURNITURE

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Rowles Co., E. W. A.
Sheldon & Co., E. H.
Vitek Manufacturing Co., Inc.

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Rundle-Spence Mfg. Company
Taylor Company, Halsey W.

DUPLICATORS

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Safe-Guard Check Writer Corp.

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Westinghouse Electric & Mfg. Co.

ELECTRICAL REFRIGERATION

General Electric Company

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Weber Costello Co.

ERASER CLEANERS

Weber Costello Company

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Clay Environment Corp.
Cyclone Fence Co.
Page Fence Association
Stewart Iron Works Co., The

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FIRE ALARM SYSTEMS

Standard Electric Time Company

FIRE ESCAPES

Logan Co.
Potter Manufacturing Corp.

FIRE EXIT LATCHES

Potter Manufacturing Corp.
Steffens-Amberg Company
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FIREPROOF DOORS

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Federation of Mutual Fire Insurance
Companies
Home Insurance Company, The

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Asbestos Buildings Company

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FLAG POLES

Biefeld & Company, Otto
Rowles Co., E. W. A.

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Heywood-Wakefield Co.

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Continental Chemical Corporation
Eagle Soap Corporation
Midland Chemical Laboratories

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Bruce Company, The E. L.
Carter Bloxonend Flooring Co.
Congoleum-Nairn, Inc.
Truscon Steel Company

FLOORING COMPOSITION

American Asphalt Tile Corporation
Bruce Company, The E. L.
Congoleum-Nairn, Inc.

FLOOR TILES

American Asphalt Tile Corporation
Bruce Company, The E. L.
Congoleum-Nairn, Inc.
Norton Company

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Truscon Steel Company

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Continental Chemical Corporation
Eagle Soap Corporation
Midland Chemical Laboratories
Sonneborn Sons, L.

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Continental Chemical Corporation

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Clow & Sons, James B.

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Mahoney Chair Company
Maple City Stamping Company
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Royal Metal Mfg. Co.
Stakmore Company
Standard Mfg. Company
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Vitek Manufacturing Co.

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Horn Folding Partition Co.,
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Wilson Corp., Jas. G.

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Beckley-Cardy Company
Cleveland Range Company, The
Columbia School Supply Company
Great Northern Chair Co., The
Heywood-Wakefield Co.
Imperial Desk Company
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National School Equipment Co.
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Rowles Co., E. W. A.
Royal Metal Mfg. Co.
Stakmore Company
Standard School Equipment Co.
Steel Furniture Company
Wark-Beacon Steel Furniture Co.

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Manufacturers Glass Company
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Wayne Iron Works

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Medart Mfg. Co., Fred

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Heggie Simplex Boiler Company
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Sanford Mfg. Co.

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U. S. Inkwell Company

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Midland Chemical Laboratories
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Pick-Barth Co., Inc., Albert
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Leitz, Inc., E.

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Peterson & Co., Leonard
Sheldon & Company, E. H.

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Ideal Power Lawn Mower Co.
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Gaylord Brothers
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Peterson & Company, Leonard
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Gaylord Brothers

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Graybar Electric Co., Inc.
Holophone Company, Inc.

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Eagle Soap Corporation
Midland Chemical Laboratories

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Lyon Metal Products, Inc.
Medart Mfg. Co., Fred
Naragansett Machine Company
North Western Steel Products Co.
Wilson Corp., Jas. G.

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Miller Keyless Lock Co., J. B.

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Roddie Lumber & Veneer Company

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Weber Costello Company

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Truscon Steel Company

METAL LATH

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North Western Steel Products Company
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Chicago Gymnasium Equipment Co.
Hill-Standard Company
Medart Mfg. Co., Fred
Mitchell Manufacturing Co.
Naragansett Machine Company
Potter Manufacturing Corp.

PLAYGROUND ENCLOSURES
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Cyclone Fence Co.

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Crane Company
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Clarke Sanding Machine Company

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Asbestos Buildings Co.
Circle A Products Corporation
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Minter Homes Corporation

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Screen Corp.

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National Theatre Supply Co.

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Holmes Projector Company

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Western Electric Co.

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Centrifugal, Sump**
Nash Engineering Co.

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Multi-Selecto Phonograph, Inc.
Radio-Victor Corporation of America

RANGES
Cleveland Range Company, The
Westinghouse Electric & Mfg. Co.

RECORD SYSTEMS
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REFRIGERATION
General Electric Company

REINFORCED STEEL
Berger Manufacturing Company
Truscon Steel Company

REPRODUCTION SYSTEMS
Western Electric Co.

ROLLING PARTITIONS
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RULERS
Seneca Falls Rule & Block Co.

SAFETY STAIR TREADS
American Abrasive Metals Co.

SANDERS
Clarke Sanding Machine Company
National Sanding Machine Co., The

SASH OPERATING DEVICES, STEEL
Detroit Steel Products Company
Truscon Steel Company

SASH, VENTILATING
Detroit Steel Products Company

SCIENTIFIC APPARATUS
Rowles Co., E. W. A.
Standard Electric Time Company

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Trans-Lux Daylight Picture
Screen Corp.

SCRUBBING EQUIPMENT
Finnell System, Inc.

SEWAGE EJECTORS
Nash Engineering Co.

SEWING MACHINES
Singer Sewing Machine Co.

SHADE ADJUSTERS
Eveleth Mfg. Co.

SHOWERS
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Hoffmann & Billings Mfg. Co.

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N. Y. Silicate Book Slate Co.
Weber Costello Company

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Electrical Research Products, Inc.

SOUND SYSTEMS
Radio Receptor Company, Inc.

SPRAY PAINTING EQUIPMENT
DeVilbiss Mfg. Co., The
Vortex Mfg. Co.

STAFF LINERS
Weber Costello Company

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AND SCENERY**
Acme Scenic Studios
Beck & Sons Co., The Wm.
Belson Mfg. Co.
Jackson Corp., A. P.
National Theatre Supply Co.
Novelty Scenic Studios
Standard Decorating Co.
Tiffin Scenic Studios
Twin City Scenic Company
Universal Scenic Studios, Inc.
Weiss & Sons, I.

STAIR TREADS
American Abrasive Metals Co.
Norton Company
Sanymetal Products Company

STEEL JOISTS
Truscon Steel Company

STEEL STORAGE CABINETS
Durabilt Steel Locker Co.
Medart Mfg. Co., Fred
North Western Steel Products Co.

STEEL WINDOWS
Detroit Steel Products Company
North Western Steel Products Company
Truscon Steel Company

STOOLS—STEEL ADJUSTABLE
Angle Steel Stool Company
Vitek Mfg. Co.

TABLES
Gunn Furniture Company
Kimball Company, W. W.
Mutschler Bros. Company
Remington-Rand Business Service, Inc.

TABLETS—BRONZE
Russell & Sons Co., Albert

TALKING MACHINES
Radio-Victor Corporation

TEACHER AGENCIES
Natl. Association of Teacher Agencies
Teacher Agencies Directory

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Sonneborn Sons, L.

TELEPHONE SYSTEMS
Automatic Electric Company
Graybar Electric Co., Inc.
North Electric Mfg. Company, The
Standard Electric Time Company

TEMPERATURE REGULATION
Johnson Service Company

TOILET PAPER AND FIXTURES
A. P. W. Paper Company

TOWELS
A. P. W. Paper Company
Bay West Paper Company
Brown Company

TOILET PARTITIONS
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Sanymetal Products Company
Structural Slate Company
Weiss Mfg. Co., Henry

TYPEWRITERS
Remington-Rand Business Service, Inc.
Smith & Corona Typewriters Inc., L C
Underwood Typewriter Company

VACUUM CLEANING SYSTEMS
Spencer Turbine Company, The
Sturtevant Co., B. F.

VACUUM PUMPS
Dunham Company, C. A.
Nash Engineering Company

VALVES—FITTINGS
Bowling Manufacturing Co., The
Clow & Sons, James B.
Crane Company
Sloan Valve Company

VENETIAN BLINDS
Burlington Venetian Blind Co.

VENTILATING SYSTEMS
Buckeye Blower Company
Nelson Corp., The Herman
Peerless Unit Vent. Co., Inc.
Sturtevant Company, B. F.

VENTILATORS
Sturtevant Co., B. F.

VOCATIONAL EQUIPMENT
Christiansen, C.
Columbia School Supply Co.
Kimball Company, W. W.
Richards-Wilcox Mfg. Co.
Sheldon & Company, E. H.
Wallace & Co., J. D.

WARDROBES
Evans, W. L.
K-M Supply Company
Park, Winton & True Co.
Progressive School Equipment Mfg.
Co., The
Wilson Corp., Jas. G.

WASTE PAPER BASKETS
National Vulcanized Fibre Co.
North Western Steel Products Company

WASTE RECEPTACLES
Solar-Sturges Mfg. Co.

WATER CLOSETS
Bowling Manufacturing Co., The
Vogel Co., Joseph A.

WATER CROCKS
American Crayon Company
Bradley Company, Milton

WATER PURIFIERS
Clow & Sons, Jas. B. (R. U. V.)
Wallace & Tiernan, Inc.

WATERPROOFING
Sonneborn Sons, L.
Truscon Steel Company

WAX CRAYONS
Bradley Company, Milton

WEATHERSTRIPS
Athey Company, The

WINDOWS—ADJUSTABLE
Austral Window Company
Detroit Steel Products Company
North Western Steel Products Co.
Truscon Steel Company
Universal Window Company
Williams Pivot Sash Company

WINDOW FIXTURES
Austral Window Company
Columbia Mills, Inc.
Peerless Unit Ventilation Co., Inc.
Williams Pivot Sash Company

WINDOW GUARDS
American Fence Construction Co.
Badger Wire & Iron Works
Logan Co.
North Western Steel Products Company
Stewart Iron Works Co., The

WINDOWS—REVERSIBLE
Austral Window Company
Detroit Steel Products Company
Williams Pivot Sash Company

WINDOW SHADE CLOTH
Columbia Mills, Inc.
Du Pont de Nemours & Co., E. I.
Hartshorn Company, Stewart

WINDOW SHADE ROLLERS
Columbia Mills, Inc.
Hartshorn Company, Stewart

WINDOW SHADES
Athey Company, The
Beckley-Cardy Company
Burlington Venetian Blind Co.
Columbia Mills, Inc.
Draper Shade Co., Luther O.
Du Pont de Nemours & Co., E. I.
Hartshorn Company, Stewart
Maxwell & Co., Inc., S. A.

WINDOWS—STEEL
Detroit Steel Products Company
Truscon Steel Company

WIRE GUARDS
Badger Wire & Iron Works
Cyclone Fence Co.
Logan Co.
Stewart Iron Works Co., The

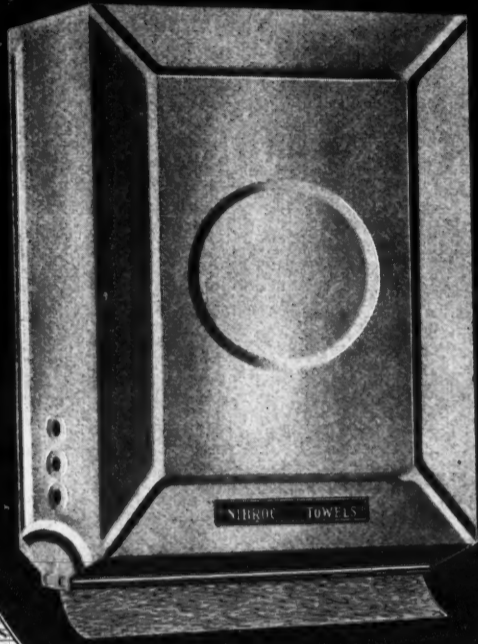
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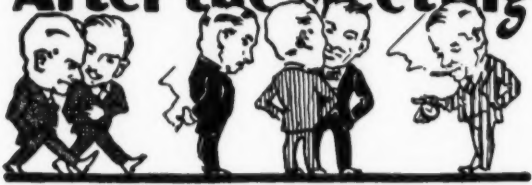
THE very finest and most economical paper towels you can obtain—they exceed all expectations! Their outstanding emollient and antiseptic qualities, together with their great strength and absorption will convince you. NIBROCS are made only from long, pure spruce fibres, in *brilliant white* and *golden brown*. One single NIBROC will thoroughly dry the wettest hands without falling to pieces. In school washrooms, NIBROCS are a necessary factor in maintaining wholesome conditions. They encourage children to wash their hands more often and eliminate the spreading of infectious diseases found on common cloth or roller towels. NIBROCS are lintless, and are served clean and fresh, individually from dust-proof, key-locked, enameled cabinets, which are loaned without charge. Write for generous supply of NIBROCS today.



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SCHOOLBOY HOWLERS

Teachers and school principals frequently come in contact with some of the queer answers to school examination questions. They frequently furnish occasions for amusement and sometimes show how far afield a pupil may go in answering some of the simple questions.

Schoolboy howlers, gleaned from the recent examination in high-school English, were read by Supt. Edward Roberts, of Cincinnati, to the amusement of the Schoolmasters' Club, at its annual dinner, February 8. Some of these "boners" follow:

"Ophelia drowned herself because she thought Hamlet crazy. And to balance his apparent disregard of her affections she goes crazy."

"The funeral procession was a social activity."

"Queen Gertrude drank a potion that the king had planted for Hamlet. All these deaths could have been avoided if Hamlet had been a trifle more enthusiastic about the matter of his father's death as was Laertes about Polonius. Laertes stabbed Hamlet and he died last."

"Subservience in Hamlet's character kept him from being a murderer instead of the student that he was. He always had that undermining influence."

"Sire de M's Door caused me some excitement when Don would rather be dashed from a tower than marry Blanche—but he couldn't last."

"Browning wrote these lines after Evelyn Hope had passed out."

"Lincoln had a style all his own. He always spoke straight from the heart with his feelings behind."

"Thomas Jefferson always was a loose-jointed fellow, but he became looser when he purchased Louisiana."

"An institution is a public place that does the community some good."

Go Up One

Teacher: "If I tear a piece of paper into four, what do I get?"

Pupil: "Quarters."

Teacher: "And if I divide it into eight?"

Pupil: "Eights."

Teacher: "And if I divide it into eight thousand parts?"

Pupil: "Confetti, sir."

Hard Luck

He was up for the university examination. His intellectual attainments were known to be slight, but the powers were anxious to pass him, for he was an excellent football player.

"Just put down something," pleaded his instructor, "and we'll get you through somehow," and he left the young man to it.

The latter sat for nearly two hours gazing at the virgin paper before him.

Then he put down the one word "dam."

Later on the tutor came up to him more in sorrow than in anger.

"We can't pass you," he said despairingly. "You spelled it wrong."—Exchange.

Oh!

"Teddy," exclaimed his teacher, as she glanced over his homework, "I don't see how it is possible for a single person to make so many mistakes."

"It wasn't a single person, teacher," Teddy explained. "Pop helped me."

Also Correct

"William," said his history teacher, "can you tell me what Archimedes discovered when he was taking his bath?"

"Yes'm," Willie replied promptly. "Dirt."

Good Evidence

"Good morning, Mrs. Jones," said the minister, who had dropped in for a morning call, "Why isn't your little boy in school?"

"Oh," replied Mrs. Jones, "Orville learns so fast that he doesn't need to go to school. He's the brightest one in his class."

"Indeed? Does his teacher say so?"

"Oh, yes," beamed the fond mother proudly. "Just the other day she sent me word that if all her pupils were like little Orville, she would close the school at once."



USEFUL TEACHING POSTER

This attractive poster, in bright colors, will be supplied free of charge on request to any classroom or assembly bulletin board by the American Seating Company, 1030 Lytton Building, Chicago. The poster will help keep pupils mindful of their duty toward themselves in cultivating habits of posture for promoting physical growth and grace of movement.

SUGGESTIVE LABORATORY FURNITURE FOR SCHOOLS

The Scientific Equipment Company, of 70 Fifth Ave., New York City, has just issued an illustrated eight-page circular, describing a variety of suggestive laboratory furniture installations for schools and colleges. In addition to descriptions of equipment for science, chemistry, physics, biology, and histology laboratories, the pamphlet offers a typical floor-plan layout for a high-school laboratory department.

MOTION PICTURES FOR SCHOOLS

The National Theatre Supply Company, of Chicago, Ill., through its educational division, has just issued a booklet, entitled *Motion Pictures for the School Auditorium*, in which it lays down the fundamentals of good projection in relation to auditorium construction and projection equipment. The booklet gives school administrators and designers a general survey of the technical problems to be faced in bringing motion pictures into the auditorium. In addition to the descriptive material, the booklet contains a typical layout of a projection room for an average school auditorium, illustrations of standard equipment, a specimen list of equipment for the school booth, and an outline of equipment for the school stage.

The booklet is available from the home office at 624 South Michigan Ave., Chicago, Ill.

NEW CATALOG OF MIDLAND CHEMICALS

The Midland Chemical Laboratories, Inc., of Dubuque, Iowa, has issued its latest catalog of school housekeeping supplies. The catalog contains 32 pages devoted to the products manufactured by the firm for cleanliness and sanitation in schools, including scrubbing compound, pine cleanser, tileoleum powder, potash compound, waxoleum, floor dressing, liquid soap, Kemloh cleanser, blackboard cleaner, disinfectants and fumigators.

School officials and supply superintendents who are interested may obtain a copy of the catalog by writing to the Midland Chemical Laboratories at Dubuque, Iowa.

ISSUE NEW CATALOG OF FOLDING FURNITURE

The Tucker Duck & Rubber Company, of Fort Smith, Ark., has just issued an attractive catalog, illustrating and describing its Peerless folding furniture. The booklet which is printed in colors, covers an extensive line, including cots, chairs, stools, and tables. Copies are available for the use of school officials by writing to the Tucker Company at Fort Smith, Ark.

THE PLANNING OF SCHOOL RESTAURANTS

In the planning of school lunchrooms considerable attention must be given to the needs of the school and the size of the budget. In the main, the problem involves the adoption of a scientific plan, an economical arrangement of the service, and correct equipment for the special use intended.

The John Van Range Company, of Cincinnati, Ohio, has just issued a booklet on "The Planning of Restaurants," which offers a wealth of useful and practical information for school authorities who are planning the establishment of a school lunchroom or cafeteria. It takes up such aspects as the architectural design,

space requirements, location of kitchen, lighting and ventilation, type and finish of floors, walls, and ceilings, special seating arrangement, styles of counter layout, and type and quality of the equipment.

The booklet lists and describes a number of schools which have been provided with the Van Range restaurant equipment. Complete information will be sent to any school official or architect upon request.

NEW WILSON ALUMINUM VENTILATED AWNING

The J. G. Wilson Corporation, of New York City, manufacturers of the well-known Wilson folding partitions, has just issued a 6-page circular, describing and illustrating its new No. 8 ventilated aluminum awning for schools.

The Wilson aluminum awning is an all-metal, fire-proof awning, built to withstand a large amount of wear and tear, and is impervious to the action of the elements in any climate. It combines in one product the essential elements of permanence, protection, and beauty, and because of its long life and infrequent replacements, involves practically no annual cost for repairs.

NEW ANTISLIP MATERIAL

A new product to serve as an antislip walkway surface has been brought out by the American Abrasive Metals Company, 50 Church Street, New York City. This concern is now the maker of ferulum, bronzalun, and almalun. The new product is called Nicalun.

NEW SAFETY LADDER

The Dayton safety ladder, a new and improved type of ladder suitable for use in schools and institutions, has been placed on the market by the Dayton Safety Ladder Company, 121 W. Third Street, Cincinnati, Ohio. The ladder is made in sizes 3 to 16 ft. long. Its special arrangement permits of close work against walls and in corners. Antislip treads and special means to provide against overturning are features of the ladder.

MR. PARMENTER ELECTED PRESIDENT OF AMERICAN CRAYON CO.

Mr. George E. Parmenter, who was recently elected president of the American Crayon Company of Sandusky, Ohio, succeeds the late Mr. L. L. Curtis. Mr. Parmenter, who has been connected with the American Crayon Company for more than 50 years, formerly



GEO. E. PARMENTER
New President of the American Crayon Co.

held the position of first vice-president and eastern sales manager of the firm. Mr. Parmenter will continue to make his home in Branford, Conn., and will have his business headquarters in New York City.

The other officers elected at the annual reorganization meeting are: First vice-president, Mr. Carey H. Lord; secretary-treasurer, Mr. A. M. Spore; second vice-president and purchasing agent, Mr. Earl L. Curtis; assistant secretary-treasurer, Mr. John C. Whitworth; office manager and auditor, Mr. Leland P. Spore; factory manager, Mr. L. B. Curtis. The directors of the firm are Mr. Carl C. Curtis of Pasadena, Calif., and Mr. T. B. Taylor of Sandusky, Ohio.

GREAT PUBLISHER PASSES

Major George Haven Putnam, dean of American publishers and Civil War veteran, died at his home in New York City, on February 27. He was born in London, England. His father, George Palmer Putnam, was the founder of the publishing house bearing his name. Major Putnam is survived by his son Palmer Cosslett Putnam.

A HISTORY OF VENTILATION

The Herman Nelson Corporation, of Moline, Ill., has issued a 24-page booklet, entitled "A Short History of Ventilation." The booklet which is a short history of ventilating practice in schools and similar institutions, is written in layman's language, and recounts the story of those who have been connected with the practical side of the ventilating movement.

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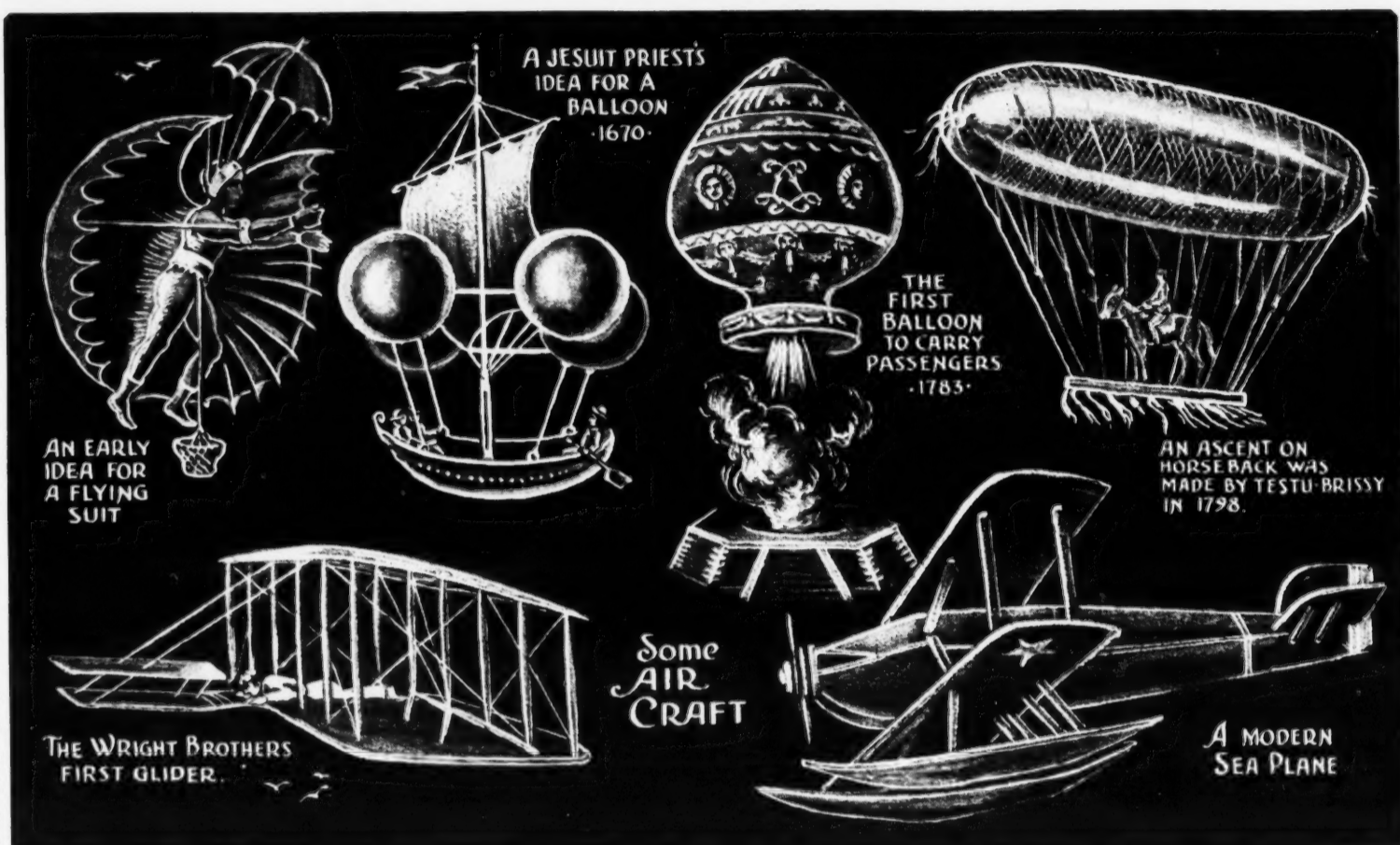
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to full advantage? Teachers everywhere are relying more and more upon visual instruction to help carry out their class projects. Sketches like the above leave a permanent impression that is rarely forgotten.

Two blackboard crayons that are popular in school room work are

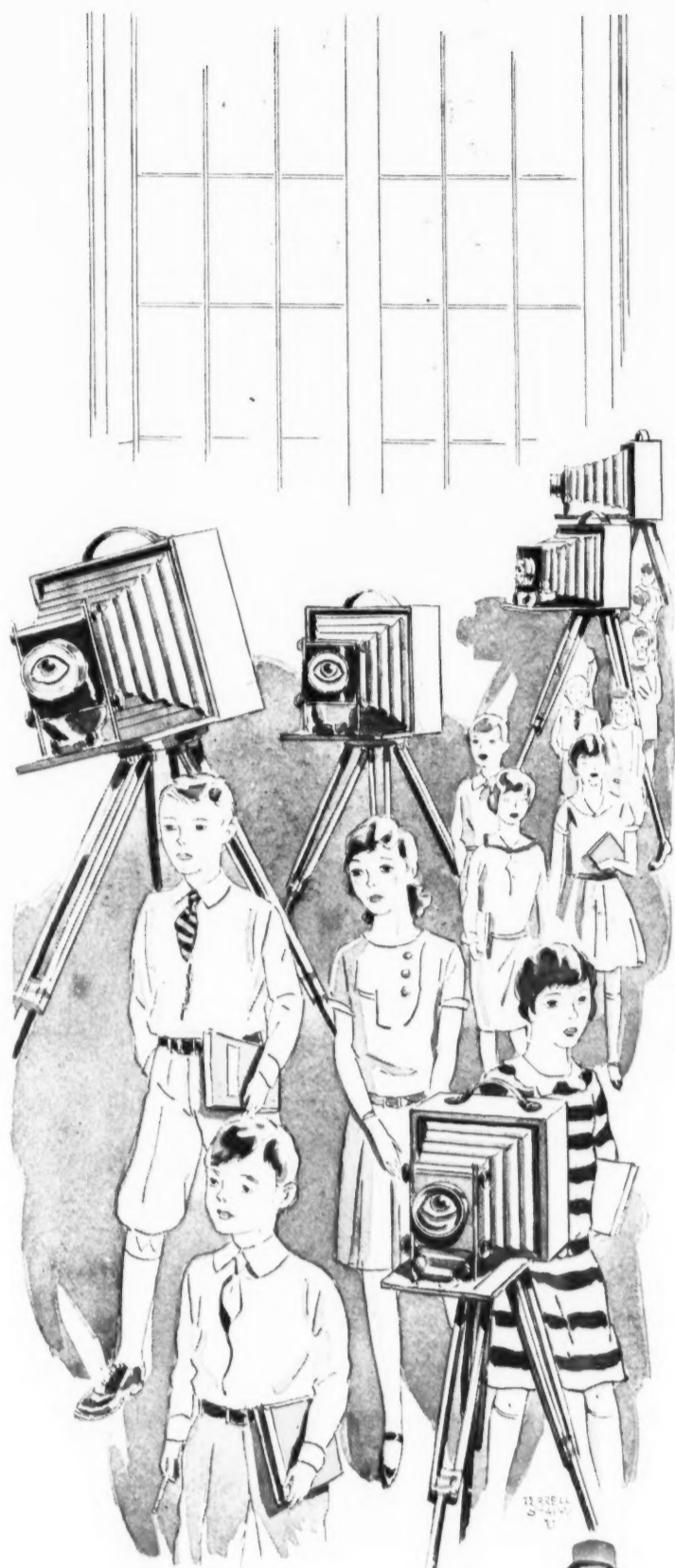
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These chalk crayons are both dustless, make a clear white mark and do not break easily.

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Hundreds of schools throughout the land have found the FINNELL Electric Floor Machine a great aid in maintaining the sort of floors a school should have. Grime-covered floors, oily, greasy floors, floors with varnish discolored, wax worn off, or surface scratched, respond to regular upkeep with the FINNELL. This multiple-unit system of scrubbing, waxing and polishing, gives floors of every type and description a new lustrous finish.

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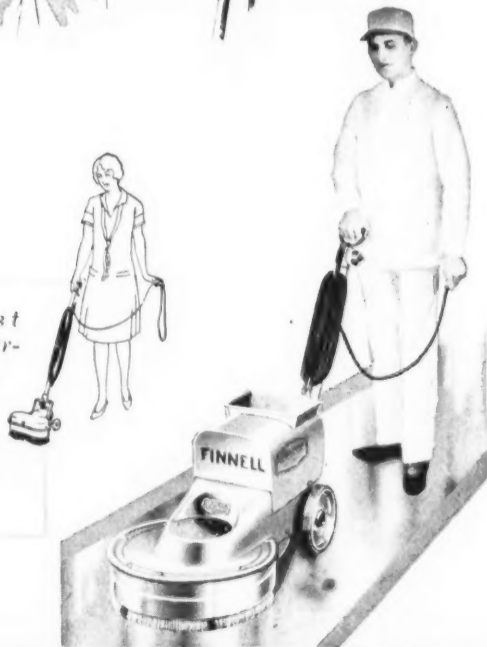
An eastern city uses thirteen FINNELL Floor Machines to care for the floors in its twenty-eight public schools. The machines scrub wood, concrete and tile floors, and wax linoleum floors. "Hand scrubbing would require at least three times as long. The FINNELL Machines keep the twenty-eight buildings far cleaner than ever before, and release janitors for more important work."

Now available in the FINNELL SYSTEM is the Electric Vacuum Mopper, which picks up the dirty water from the floor, then rinses the floor with clean water, picking it up immediately, and leaving the floor dry as well as clean.

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